





BRITISH ZOOLOGY.

CLASS II. BIRDS.

DIV. II. WATER FOWL.



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Printed for Benj. White,
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BRITISH ZOOLOGY.

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CLASS II. DIVISION II.

W A T E R - F O W L.

W I T H A N

A P P E N D I X.

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D I V I S I O N I I .

W A T E R - F O W L S .

VOL. II.

F f



Paulou (3000)

W. H. P.

DIV. II. WATER FOWLS:

SECT. I. WITH CLOVEN FEET.

II. WITH FINNED FEET.

III. WITH WEBBED FEET.

BILL long, strong and pointed.

NOSTRILS linear.

TONGUE pointed.

TOES connected as far as the first joint by a strong membrane.

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F E M A L E.

- | | |
|---------------------------------------|--------------------------------------|
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| Ardea cinerea. <i>Lin. syst.</i> 236. | <i>Brit. Zool.</i> 116. |
| <i>Danis et Norvegis</i> Heyre v. | |

THIS bird is remarkably light in proportion to its bulk, scarce weighing three pounds and a half: the length is three

F f 2

feet

feet two inches; the breadth five feet four inches. The body is very small, and always lean; and the skin scarce thicker than what is called gold-beater's skin. It must be capable of bearing a long abstinence, as its food, which is fish and frogs, cannot be readily got at all times. It commits great devastation in our ponds; but being unprovided with webs to swim, nature has furnished it with very long legs to wade after its prey. It perches and builds in trees, and sometimes in high cliffs over the sea, commonly in company with many others, like rooks. At *Cressi Hall* near *Gosberton* in *Lincolnshire* I have counted above eighty nests in one tree. It makes its nest of sticks, lines it with wool; and lays five or six large eggs of a pale green color. During incubation, the male passes much of its time perched by the female. They desert their nests during winter, excepting in *February*, when they resort to repair them. It was formerly in this country a bird of game, heron-hawking being so favourite a diversion of our ancestors, that laws were enacted for the preservation of the species, and the person who destroyed their eggs was liable to a penalty of twenty shillings, for each offence. Not to know the *Hawk* from the *Heronshaw* was an old proverb*, taken originally from this diversion; but in course of time served to ex-

* In after times this proverb was absurdly corrupted to, He does not know a *hawk* from a *hand-saw*.

press great ignorance in any science. This bird was formerly much esteemed as a food; made a favourite dish at great tables, and was valued at the same rate as a Pheasant. It is said to be very long lived; by Mr. *Keyser's* account it may exceed sixty years*: and by a recent instance of one that was taken in *Holland* by a hawk belonging to the stadtholder, its longevity is again confirmed, the bird having a silver plate fastened to one leg, with an inscription, importing it had been before struck by the elector of *Cologne's* hawks in 1735.

The male is a most elegant bird: the weight about three pounds and a half, the length, three feet three; the breadth, five feet four; the bill six inches long, very strong and pointed: the edges thin and rough; the color dusky above, yellow beneath; nostrils linear; the irides of a deep yellow; orbits and space between them and the bill covered with a bare greenish skin.

The forehead and crown white, the hind part of the head adorned with a loose pendent crest of long black feathers waving with the wind; the upper part of the neck is of a pure white, and the coverts of the wings of a light grey; the back clad only with down, covered with the scapulars; the fore part of the neck white spotted with a double row of black: the feathers are white, long, narrow,

* *Keyser's Travels*, I. 70.

unwebbed, falling loose over the breast; the scapulars of the same texture, grey streaked with white.

The ridge of the wing white, primaries and bastard wing black; along the sides beneath the wings is a bed of black feathers, very long, soft and elegant; in old times used as egrets for the hair, or ornaments to the caps of Knights of the garter; the breast, belly, and thighs white: the last dashed with yellow. The tail consists of twelve short cinereous feathers: the legs are of a dirty green: the toes long, the claws short, the inner edge of the middle claw finely ferrated.

FEMALE

The head of the female is grey: it wants the long crest, having only a short plume of dusky feathers: the feathers above the breast short; the scapulars grey and webbed: the sides grey. This has hitherto been supposed to be a distinct species from the former; but later observations prove them to be the same.

174. BIT-
TERN.

Le Butor. *Belon av.* 192.
Brind, Rordump. *Gesner*
av. 215.
The Myredromble. *Turner.*
Trombone, Terrabuso. *Aldr.*
av. III. 164.
Bittour, Bittern, or Miredrum. *Wil. orn.* 282.
Raii syn. av. 100.
Botaurus, le Butor. *Briffon*
av. V. 444. *tab.* 37.

Garza bionda, o dicolor d'oro.
Zinan. 112. *Scopoli,* No.
125.
Rohrtrummel, Mofskuh.
Kram. 348.
Rohrdommel. *Frisch,* II. 205.
Ardea stellaris. *Lin. syst.* 239.
Rordrum. *Faun. Succ. sp.*
164.
Danis Rordrum. *Brunnich,*
155.
Br. Zool. 117. *tab.* A. 1.

THE bittern is a very retired bird, concealing itself in the midst of reeds and rushes in marshy

marshy places. It is with great difficulty provoked to flight, and when on wing has so dull and flagging a pace, as to acquire among the *Greeks* the title of *αργή* * or the lazy. It has two kinds of notes; the one croaking, when it is disturbed: the other bellowing, which it commences in the spring and ends in autumn. Mr. *Willughby* says, that in the latter season it soars into the air with a spiral ascent to a great height, making at the same time a singular noise. From the first observation, we believe this to be the species of heron that *Virgil* alludes to among the birds that forbode a tempest,

In sicco ludunt fulicæ, notasque paludes
Deserit, atque altam supra volat *Ardea* nubem †.

For the antients mention three kinds ‡; the *Leucon*, or white heron; the *Pellos*, supposed to be the common sort; and the *Asterias*, or bittern; which seems to have acquired that name from this circumstance of its aspiring flight, as it were attempting, at certain seasons, the very stars; though at other times its motion was so dull, as to merit the epithet of *lazy*.

Some commentators have supposed this to have been the *Taurus* of *Pliny*; but as he has expressly declared that to be a small bird, remarkable for

* *Arist. hist. an.* 1056.

† *Georg.* I. 363.

‡ *Arist. hist. an.* 1006. *Plin. lib.* x. c. 60.

DESCRIP.

imitating the lowing of oxen, we must deny the explanation; and wait for the discovery of the *Roman* naturalist's animal from some of the *literati* of *Arles*, in which neighbourhood *Pliny* says the bird was found *. In size it is inferior to the heron: the bill is weaker, and only four inches long: the upper mandible a little arched; the edges of the lower jagged: the rictus or gape is so wide, that the eyes seem placed in the bill: the irides are next the pupil yellow; above the yellow incline to hazel: the ears are large and open. The crown of the head is black; the feathers on the hind part form a sort of short pendent crest: at each corner of the mouth is a black spot: the plumage of this bird is of very pale dull yellow, spotted, barred, or striped with black: the bastard wing, the greater coverts of the wings, and the quill-feathers are of a bright ferruginous color, regularly marked with black bars: the lower belly is of a whitish yellow: the tail is very short, and consists of only ten feathers. The feathers on the breast are very long, and hang loose: the legs are of a pale green. All the claws are long and slender: the inner side of the middle claw finely serrated to hold its prey the better; its hind claw is remarkably long, and being a supposed preservative for the teeth, is sometimes set in silver and used as a tooth-pick. Besides this common species, Mr. *Edwards* mentions a

* Lib. x. c. 42.





small one of the size of a lapwing, shot near *Skrewsbury*. He adds no more than that the crown of the head was black : as this answers the description of a kind frequent in *Switzerland* and *Austria* *, we imagine it to be a strayed bird from those parts.

It builds its nest with the leaves of water plants on some dry clump among the reeds, and lays five or six eggs, of a cinereous green color. This bird and the heron are very apt to strike at the fowler's eyes, when only maimed. The food of the bittern is chiefly frogs ; not that it rejects fish, for small trouts have been met with in their stomachs. In the reign of *Henry VIII.* it was held in much esteem at our tables ; and valued at one shilling. Its flesh has much the flavour of a hare ; and nothing of the fishiness of that of the heron.

- | | | |
|---|---|-------------|
| Le Heron blanc. <i>Belon av.</i> | <i>Ardea candida,</i> le Heron | 175. WHITE. |
| 191. | blanc. <i>Briffon av.</i> V. 428. | |
| <i>Ardea alba.</i> <i>Gesner av.</i> 213. | Großer weißer Rager. <i>Kram.</i> | |
| <i>Turner.</i> | 346. <i>Scopoli,</i> No. 126. | |
| <i>Vil. orn.</i> 279. | <i>Ardea alba.</i> <i>Lin. syst.</i> 239. | |
| <i>Raii syn. av.</i> 99. | <i>Faun. Suec. sp.</i> 166. | |
| | <i>Br. Zool.</i> 117. | |

THIS bird has not fallen within our observation; therefore we must give Mr. *Willughby's*

* *Kramer Elench. anim. Austriæ,* 348.

account of it. The length to the end of the feet is fifty-three inches and a half, to that of the tail only forty; the breadth sixty inches; the weight forty ounces.

The bill is yellowish; the naked skin between that and the eyes green; the edges of the eye-lids, and the irides, are of a pale yellow; the legs are black; the inner edge of the middle claw serrated: the whole plumage is of a snowy whiteness. This bird is very common in many parts of *Europe*; *Turner* says, that in his time this species bred (though rarely) in the same places with the common sort: but we believe it to be seldom found with us at present, any more than the small species of crested white heron mentioned by *Leland*, under the name of *Egritte*, in one of the bills of fare in the magnificent feasts of our ancestors*.

* *Leland's collectanea*, Vol. 6. L' Aigrette. *Briffon av.* V. 431.

CURLEW.



BILL long, slender, incurvated.

NOSTRILS linear, placed near the base.

TONGUE short, sharp pointed.

TOES connected as far as the first joint by a strong membrane.

XXIX.
CURLEW.

Le Corlieu. *Belon av.* 204.

Arquata, five numenius. *Gesner av.* 221.

Arcafe Torquato. *Aldr. av.*

III. 169.

Wil. orn. 294.

Raii syn. av. 103.

Le Courly. *Briffon av.* V.

311.

Goisser, Brach-scknepf. *Kram.*

350. *Frisch*, II. 229.

Scolopax arquata. Lin. syst.

242.

Faun. Suec. sp. 168.

Danis Heel-spove. *Regn. Spa-*

aer. Regn. Spove. Brunnich,

158.

Br. Zool. 118.

176. CUR-
LEW.

THESE birds frequent our sea coasts and marshes in the winter time in large flocks, walking on the open sands; feeding on shells, frogs, crabs, and other marine insects: in summer they retire to the mountainous and unfrequented parts of the country, where they pair and breed. Their eggs are of a pale olive color, marked with irregular but distinct spots of pale brown. Their flesh is very rank and fishy, notwithstanding an old *English* proverb in its favour.

Curlews differ much in weight and size; some weighing thirty-seven ounces, others not twenty-two: the length of the largest to the tip of the tail

DESCRIP.

tail twenty-five inches; the breadth three feet five inches; the bill is seven inches long: the head, neck, and coverts of the wings are of a pale brown; the middle of each feather black; the breast and belly white, marked with narrow oblong black lines: the back is white, spotted with a few black strokes: the quill-feathers are black, but the inner webs spotted with white: the tail white, tinged with red and beautifully barred with black; the legs are long, strong, and of a bluish grey color: the bottoms of the toes flat and broad, to enable it to walk on the soft mud, in search of food.

177. WHIM-
BREL.

Phæopus altera, vel arquata
minor. *Gesner av.* 499.
Tarangolo, Girardello. *Aldr.*
av. III. 180.
Wil. orn. 294.
Raii syn. av. 103.
Edw. av. 307.
Scolopax Phæopus. *Lin. syst.*
243. *Scopoli*, No. 132.
Windspole, Spof. *Faun. Succ.*
Sp. 169.

Kleiner Goisser. *Kram.* 350.
Kleine Art Brachvogel or Re-
genvogel. *Frisch*, II. 225.
Le petit Courly, ou le Cour-
lieu. Numenius minor.
Briffon av. V. 317. *tab.*
27.
Danis Mellum-Spove. *Nor-*
weg. Smaae Spue. Br. 159.
Br. Zool. 119.

THE whimbrel is much less frequent on our shores than the curlew; but its haunts, food, and general appearance are much the same. It is observed to visit the neighbourhood of *Spalding* (where it is called the *Curlew knot*) in vast flocks

WHIMBREL.



flocks in *April*, but continues there no longer than *May*; nor is it seen there any other time of year: it seems at that season to be on its passage to its breeding place, which I suspect to be among the Highlands of *Scotland*.

The specific difference is the size; this never exceeding the weight of twelve ounces. The bill is two inches three quarters long; dusky above, red below: the feathers on the head and neck are brown tinged with red, marked in the middle with an oblong black spot: the cheeks of a paler color: the upper part of the back, the coverts of the wings, the scapulars, and the farthest quill-feathers, are of the same color with the neck, but the black spots spread out transversely on each web: the quill-feathers dusky; their shafts white; and their exterior webs marked with large semicircular white spots. The breast, belly, and lower part of the back are white: the coverts of the tail, and the tail itself, are of a very pale whitish brown, crossed with black bars. The legs and feet are of a dull green, and formed like those of the curlew.

DESCRIP.

I received one from *Invercauld*, shot on the *Grampian Hills*, whose length was sixteen inches; the bill two: the head round, black on the top, divided length-ways by a white line: chin white: cheeks, neck, breast, and upper part of the belly whitish brown, marked with streaks of black pointing down, with narrow streaks on the neck; broad on the belly: lower belly and vent white: back
and

and coverts of the wings dusky : the sides of each feather spotted with reddish white : lower part of the back white : rump white barred with black : tail barred with dusky and white : quill-feathers black, with large white spots on the inner webs ; the secondaries on both webs : legs black.



WOODCOCK.

N^o 178



BILL long, slender, weak and strait.

XXX. SNIPE

NOSTRILS linear, lodged in a furrow.

TONGUE pointed, slender.

TOES divided, or very slightly connected, back toe very small.

La Beccassie. *Belon av.* 272.
Rusticola, seu Perdix rustica
major (Großer schnepf).

Gesner av. 501.

Aldr. av. III. 182.

Wil. orn. 289.

Raii syn. av. 104.

La Beccassie. *Briffon av.* V.
292.

Beccaccia, Acceggia. *Zinan.*
101.

Schniffa. *Scopoli, No.* 134.

Wald schnepf. *Kram.* 351.

Frisch, II. 226. foem. 227.

Scolopax rusticola. *Lin. syst.*
243.

Morkulla. *Faun. Suec. sp.*
170.

Norvegis Blom-Rokke, Rutte,
quibusdam Krog-quist. *Dan-*
nis Holt Sneppe. *Brun-*
nich, 164.

Br. Zool. 119.

Fauna Scotica. No. 142.

178. WOOD-
COCK.

THESE birds during summer are inhabitants of the *Alps**, of *Norway*, *Sweden*, *Polish Prussia*, the march of *Brandenburg*†, and the northern parts of *Europe*: they all retire from those countries the beginning of winter, as soon as the frosts commence; which force them into milder climates, where the ground is open, and adapted to their manner of feeding. The time of their

* *Wil. orn.* 290.

† *Frisch, II.* 226.

appear-

appearance and disappearance in *Sweden*; coincides most exactly with that of their arrival in, and their retreat from *Great Britain* *. They live on worms and insects, which they search for with their long bills in soft ground and moist woods. Woodcocks generally arrive here in flocks, taking advantage of the night, or a mist: they soon separate; but before they return to their native haunts, pair. They feed and fly by night; beginning their flight in the evening, and return the same way, or through the same glades to their day retreat. They leave *England* the latter end of *February*, or beginning of *March*; not but they have been known to continue here accidentally. In *Cafe-wood*, about two miles from *Tunbridge*, a few breed almost annually: the young having been shot there the beginning of *August*, and were as healthy and vigorous as they are with us in the winter, but not so well tasted: a female with egg was shot in that neighbourhood in *April*; the egg

* M. de Geer's and Dr. Wallerius's letters to myself. M. de Geer expresses himself thus; *La Becasse (Scolopax rusticola) part d'ici vers l'automne, Je ne sçais pas au juste dans quel mois. On la trouve ici assez en abondance dans l'été. Elle a coutume au soleil couchant de faire sa volée en cercle ou toujours en rond en l'air revenant toujours dans le meme endroit a plusieurs reprises, et c'est alors qu'on peut la tirer a coup de fusil. En hiver ou ne voit aucune, elle partent alors toutes.*

M. Wallerius gave me this account of them. *Scolopaces rusticola penes nos nidificant. Sed autumnali tempore abeunt, ac vernali redeunt.*

was the size of that of a pigeon. They are remarkably tame during incubation; a person who discovered one on its nest, has often stood over, and even stroaked it: notwithstanding which it hatched the young; and in due time disappeared with them.

These birds appear in *Scotland* first on the eastern coasts, and make their progress from *East to West*. They do not arrive in *Breadalbane*, a central part of the kingdom till the beginning or middle of *November*: and the coasts of *Nether Lorn*, or of *Rosshire*, till *December* or *January*: are very rare in the more remote *Hebrides*, or in the *Orknies*. A few stragglers now and then arrive there. They are equally scarce in *Cathness*. I do not recollect that any have been discovered to have bred in *North Britain*.

Their autumnal and vernal appearances on the coast of *Suffolk* have been most accurately marked by Sir *John Cullum*, Bart. who favoured me with the following curious account.

From some old and experienced sportsmen, who live on the coast, I collected the following particulars. They come over sparingly in the first week of *October*, the greater numbers not arriving till the months of *November* and *December*, and always after sun-set. It is the wind and not the moon that determines the time of their arrival: and it is probable that this should be the case, as they come hither in quest of food, which fails then in the

places they leave. If the wind has favoured their flight, their stay on the coast, where they drop, is very short, if any : but if they have been forced to struggle with an adverse gale (such as a ship can hardly make way with) they take a day's rest, to recover their fatigue : and so greatly has their strength been exhausted, that they have been taken by hand in *Southwold* streets. They arrive not gregarious, but separate and dispersed. When the *Red wing* appears on the coast in autumn, it is certain the *Woodcocks* are at hand ; when they *Royston Crow*, they are come. Between the twelfth and twenty-fifth of *March* they flock towards the coast to be ready for their departure : the first law of nature bringing them to us, in autumn ; the second carrying them from us in spring. If the wind be propitious, they are gone immediately ; but if contrary, they are detained in the neighboring woods, or among the ling and furze on the coast. It is in this crisis that the sportsman finds extraordinary diversion : the whole country around echoes with the discharge of guns ; even seventeen brace have been killed by one person in a day : but if they are kept any time on the dry heaths, they become so lean, that they are a prey hardly worth pursuing, at least eating. The instant a fair wind springs up, they seize the opportunity, and where the sportsman has seen hundreds one day, he will not find a single bird the next. As this extraordinary diversion depends on the winds, it must

must necessarily be precarious; and it accordingly sometimes happens, that the sportsmen on the coast, for some years together know not precisely the time of the *Woodcocks* departure. They have the same harbingers (the *Red wings*) in spring, as in autumn.

In the same manner we know they quit *France*, *Germany* and *Italy*; making the northern and cold situations their general summer rendezvous. They visit *Burgundy* the latter end of *October*, but continue there only four or five weeks; it being a dry country they are forced away for want of sustenance by the first frosts. In the winter they are found in vast plenty as far south as *Smyrna* and *Aleppo**, and in the same season in *Barbary*†, where the *Africans* call them, the *ass* of the partridge: and we have been told, that some have appeared as far south as *Ægypt*, which are the remotest migrations we can trace them to on that side the eastern world; on the other side, they are found very common in *Japan*‡. The birds that resort into the countries of the *Levant*, probably come from the deserts of *Siberia* or *Tartary*§, or the cold mountains of *Armenia*.

MIGRA-
TIONS.

Our species of woodcock is unknown in *North*

* *Russel's hist. Aleppo.* 64.

† *Shaw's travels*, 253.

‡ *Kämpfer's hist. Japan.* I. 129.

§ *Bell's travels*, I. 193.

America; but a kind is found there that has the general appearance of it; but is scarce half the size, and wants the bars on the breast and belly.

DESCRIP. The weight of the woodcock is usually about twelve ounces: the length near fourteen inches: the breadth twenty-six: the bill is three inches long, dusky towards the end, reddish at the base: tongue slender, long, sharp, and hard at the point: the eyes large, and placed near the top of the head, that they may not be injured when the bird thrusts its bill into the ground: from the bill to the eyes is a black line: the forehead is a reddish ash-color: the crown of the head, the hind part of the neck, the back, the coverts of the wings, and the scapulars are prettily barred with a ferruginous red, black and grey; but on the head the black predominates: the quill-feathers are dusky, indented with red marks.

The chin is of a pale yellow: the whole underside of the body is of a dirty white, marked with numerous transverse lines of a dusky color. The tail consists of twelve feathers, dusky, or black on the one web, and marked with red on the other: the tips above are ash-colored, below white; which, when shooting on the ground was in vogue, was the sign the fowler discovered the birds by. The legs and toes are livid; the latter divided almost to their very origin, having only a very small web between the middle and interior toes; as are those of the two species of snipes found in *England*.

Godwit

Godwit, Yarwhelp, or Yar-	Limosa grisea major. La	179. God
wip. <i>Wil. orn.</i> 290.	grande.	WIT.
<i>Raii syn. av.</i> 105.	Barge grise. <i>Briffon av.</i> V.	
<i>Scolopax ægocephala. Lin.</i>	272. <i>Tab.</i> 24. <i>fig.</i> 2.	
<i>fig.</i> 246.	<i>Br. Zool.</i> 120. <i>Tab.</i>	

THIS species weighs twelve ounces and a half; DESCRIP.
the length is sixteen inches; the breadth
twenty-seven; the bill is four inches long, turns
up a little, black at the end, the rest a pale pur-
ple: from the bill to the eye is a broad white stroke:
the feathers of the head, neck, and back, are of a
light reddish brown, marked in the middle with a
dusky spot: the belly and vent feathers white: the
tail regularly barred with black and white.

The six first quill-feathers are black; their in-
terior edges of a reddish brown: the legs in some
are dusky, in others of a greyish blue; which per-
haps may be owing to different ages: the exterior
toe is connected as far as the first joint of the
middle toe, with a strong ferrated membrane. The
male is distinguished from the female by some black
lines on the breast and throat; which in the female
are wanting.

These birds are taken in the fens, in the same
season, and in the same manner with the ruffs and
reeves, and when fattened are esteemed a great de-
licacy, and sell for half a crown, or five shillings

G g 3 a piece.

a piece. A fable of the same species is placed in the net. They appear in small flocks on our coast in *September*, and continue with us the whole winter; they walk on the open sands like the curlew; and feed on insects.

M. *Briffon* has figured this bird very accurately, but has given it the synonym of our *greenshanks*. *Turner* suspects this bird to have been the *attagen* or *attagas* of the antients. *Aristophanes* names it in an address to the birds that inhabit the fens; therefore some commentators conclude it to be a water-fowl; though in a line or two after he speaks of those that frequent the beautiful meadows of *Marathon*. He then describes the bird in very striking terms, under the title of the *attagas*, the *bird with painted wings*; and in another place he styles it the *spotted attagas* *. This alone would be insufficient to prove what species the poet intended; we must therefore have recourse to *Athenæus*, who is particular in his description of the *attagas*, and evinces it to be of the partridge tribe.

He says it is less than that bird; that the back is spotted with different colors, some of a pot color, but more red; that by reason of the shortness of the wings and heaviness of the body, it is taken

* Ὀρνις τε πτεροποιμία
ατταγᾶς.

Ατταγας εἶδος παρ' ἡμῶν ποιμία κεκλήσεται.

Av. 249. 762.

easily

easily by the fowlers. That it rolls in the dust, brings many young, and feeds on seeds.

We are sorry to own our small acquaintance with the zoology of *Attica*, considering the various opportunities our countrymen have had of informing themselves of it. We therefore cannot pronounce, that the *attagas* still exists on the plains of *Maraathon*; but we discover it in *Samos*, an island of *Ionia*, a country celebrated by the antients for producing the finest kinds :

Inter sapores fertur alitum primus
Ioniarum gustus attagenarum,

Is the opinion of *Martial**; and *Horace*†, and *Pliny*‡, both speak of it with applause. *Tournefort*§ has given us the figure of the bird itself, which he found in the *marshes* of *Samos*, whose painted and spotted plumage exactly answers the descriptions of *Aristophanes* and *Athenæus*. It is of the partridge genus, and known to the *Italians* by the name of *Francolino*. Those who wish to see it in its proper colors, and to be satisfied how well they agree with the descriptions of the antients, need only consult the 246th plate of the works of our ingenious friend the late Mr. *Edwards*.

* *Epig. Lib. XIII. Ep. 61.*

† *Epod. II.*

‡ *Lib. X. c. 48.*

§ *Voy. Vol. I. 311. 4to. ed.*

180. CINE-
REOUS.

THIS species was shot near *Spalding*, and the description communicated to me by the Rev. Doctor *Buckworth*.

The bill was two inches and a half long. The head, neck, and back variegated with ash-color and white: the tail slightly barred with cinereous. The throat and breast white: the last marked with a few ash-colored spots. The legs long, slender, and ash-colored.

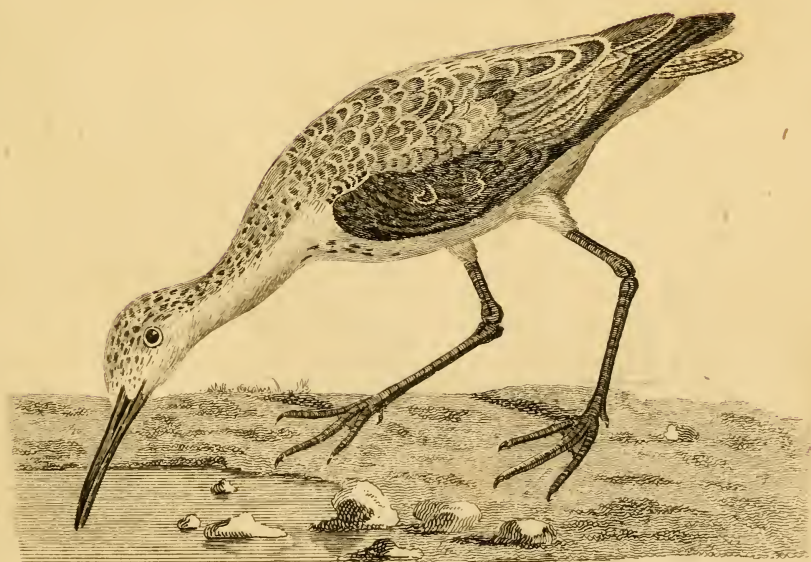
This was about the size of my *Green-shanks*: approaches it nearly in colors: but the bill was so much thicker, as to form a specific distinction.

181. RED. *Scolopax Lapponica*. *Lin. syst. Faun. Suec. sp.* 174.
246. *Br. Zool. add. plates.*

DESCRIP.

THE red godwit is superior in size to the common kind: the bill is three inches three-quarters long; not quite strait, but a little reflected upwards; the lower half black, the upper yellow: the head, neck, breast, sides, scapulars, and upper part of the back, are of a bright ferruginous color: the head marked with oblong dusky lines: the neck is plain: the breast, sides, scapulars, and back varied with transverse black bars, and

CENEREOUS GODWIT.



RED GODWIT.



and the edges of the feathers with a pale cinereous brown: the middle of the belly is white, marked sparingly with similar spots.

The lesser coverts of the wings are of a light brown: the greater tip with white: the shafts and lower interior webs of the greater quill-feathers are white: the exterior webs and upper part of the interior black: the upper half of the secondary feathers are of the same color; the lower half white: the coverts, and the lower part of the feathers of the tail are white; the upper part black; the white gradually lessening from the outmost feathers on each side: the legs are black, and four inches long: and the thighs above the knees are naked for the space of an inch and three-quarters.

These birds vary in their colors, some that we have seen being very slightly marked with red, or only marbled with it on the breast: but the reflected form of the bill is ever sufficient to determine the species. This is not a very common species in *England*; we have known it to have been shot near *Hull*; and have once met with it in a poulterer's shop in *London*. Mr. *Edwards* has figured a bird from *Hudson's Bay*, that seems related to this; but the difference in the colors of the tail, forbids our placing it among the synonyms. And *Linnaeus* omitting a description of that part, in his *Fauna Suecica*, obliges us to question whether it be the same with the above.

182. LESSER. La Barge. *Belon av.* 205. Fedoa nostra secunda, the Stone
 The second sort of Godwit, Plover *Raii syn. av.* 105.
 the *Totanus* of *Aldrovand*; *Limosa*, la Barge. *Briffon av.*
 called at *Venice*, *Vetola*. V. 262.
Wil. orn. 293. *Br. Zool.* 120.

DESCRIP. **M**R. Ray (for we are not acquainted with this species) describes it thus. Its weight is nine ounces; the length to the tail seventeen inches; to the toes twenty-one; its breadth twenty-eight: the bill like that of the former: the chin white, tinged with red: the neck ash-colored; the head of a deep ash-color, whitish about the eye; the back of a uniform brownness, not spotted like that of the preceding: the rump encompassed with a white ring: the two middle feathers of the tail black: the outmost, especially on the outside web, white almost to the tips; in the rest the white part grew less and less to the middlemost.

Besides these, Mr. *Willughby* mentions a third species, called in *Cornwal* the *Stone Curlew*; but describes it no farther than saying it has a shorter and slenderer bill than the preceding.

Limosa;

- Limosa, et glottis. Gesner av.* 519, 520. *Scolopax glottis. Lin. syst.* 245. 183. GREEN SHANK.
Piviero. Aldr. av. III. 207. *Pivier Maggiore. Zinan.* 102.
Greater Plover of Aldrovand. *Norvegis Hoeft-Fugl.* 167.
Wil. orn. 298. *Brunnich.*
Raii syn. av. 106. *Br. Zool.* 121.
Tschoket. Scopoli, No. 137.

THESE birds are not so common as the former: appearing on our coasts and wet grounds in the winter time in small flocks. The length to the end of the tail is fourteen inches, to that of the toes twenty; its breadth twenty-five. The bill is two inches and a half long: the upper mandible black, strait, and very slender; the lower reflects a little upwards: the head and upper part of the neck are ash-colored, marked with small dusky lines pointing down: over each eye passes a white line: the coverts of the wings, the scapulars, and upper part of the back are of a brownish ash-color: the quill-feathers dusky, but the inner webs speckled with white: the breast, belly, thighs, and lower part of the back are white: the tail white, marked with undulated dusky bars: the inner coverts of the wings finely crossed with double and treble rows of a dusky color.

It is a bird of an elegant shape, and small weight in proportion to its dimensions, weighing only six ounces.

The

The legs are very long and slender, bare above two inches higher than the knees. The exterior toe is united to the middle toe, as far as the second joint, by a strong membrane which borders their sides to the very end.

These birds are the *Chevaliers aux pieds verts* of the French; as the spotted redshanks are the *Chevaliers aux pieds rouges*.

184. RED
SHANK.

Gallinula erythropus. *Gesner*
av. 504.

Totanus. *Aldr.* av. III. 171.

Redshank, or Pool-snipe.

Wil. orn. 299.

Raii syn. av. 107.

Totanus, le Chevalier. *Briffon*

av. V. 188. *Tab.* 17. *fig.* 1.

Scolopax Calidris. *Lin. syst.*

245.

Sc. Totanus. *Faun. Suec. sp.*
167.

Rothfussler Kram. 353.

Kleiner grau-und-weißbunter

Sandläuffer? *Frisch*, II.

240.

Hœmantopus, magnitudine

inter *Vanellum* et *Galli-*

naginem minorem media.

Ray's itin. 247.

Br. Zool. 124.

THIS species is found on most of our shores: in the winter time it conceals itself in the gutters; and is generally found single, or at most in pair.

DESCRIP.

It weighs five ounces and a half: the length is twelve inches: the breadth twenty-one: the bill near two inches long, red at the base, black towards the point. The head, hind part of the neck, and scapulars, are of a dusky ash-color, obscurely spotted with black: the back is white, sprinkled with

with black spots: the tail elegantly barred with black and white: the cheeks, under side of the neck, and upper part of the breast are white, streaked downward with dusky lines: the belly white: the exterior webs of the quill-feathers are dusky: the legs long, and of a fine bright orange color: the outmost toe connected to the middle toe by a small membrane; the inmost by another still smaller.

It breeds in the fens, and marshes; and flies round its nest when disturbed, making a noise like a *lapwing*. It lays four eggs, whitish tinged with olive, marked with irregular spots of black chiefly on the thicker end.

I DISCOVERED this in the collection of the Rev. Mr. *Green*, shot near *Cambridge*.

185. CAM-
BRIDGE.

It is larger than the common redshank. The head, upper part of the neck, and the back are of a cinereous brown: the lesser coverts of the wings brown edged with dull white, and barred with black: the primaries dusky, whitish on their inner sides: secondaries barred with dusky and white: under side of neck and breast of a dirty white: belly and vent white: tail barred with cinereous and black: legs of an orange red.

186. SPOTTED REDSHANK. Le chevalier rouge. *Belon av.* 207. The other Totano. *Wil. orn.* 299.
Aldr. av. III. 171. Le Chevalier rouge. *Briffon av.* V. 192.

DESCRIP.

THIS species we found in the collection of *Taylor White*, Esq. In size it is equal to the green-shank: the head is of a pale ash-color, marked with oblong streaks of black: the back dusky, varied with triangular spots of white: the coverts of the wings ash-colored, spotted in the same manner: the quill-feathers dusky; breast, belly, and thighs white, the first thinly spotted with black: the middle feathers of the tail are ash-colored; the side feathers are whitish, barred with black: the legs very long, and of a bright red.

187. COMMON SN. La Becassine ou Becasseau. *Scolopax gallinago. Lin. syst.* 244.
Belon av. 215. Horfgjok. *Faun. Succ. sp.* 173.
 Gallinago, seu rusticola minor. *Gesner av.* 503. Capella cœlestis. *Klein av.* 100.
Aldr. av. III. 184. The Snipe, or Snite. *Wil. Islandis Myr Snippe. Norvegis orn.* 290. Troid Ruke. *Cimbriis quibusd. Høflegioeg. Danis*
Raii syn. av. 105. Dobbelt Sneppe, *Steen*
 La Becassine. *Briffon av.* V. Sneppe. *Br.* 160.
 298. *Tab.* 26. *fig.* 1. *Br. Zool.* 121.
 Pizzarda, Pizzardella. *Zinan. Kofitza. Scopoli, No.* 138.
 101. Moofs schnepf. *Kram.* 352.
Frisch, II. 229.

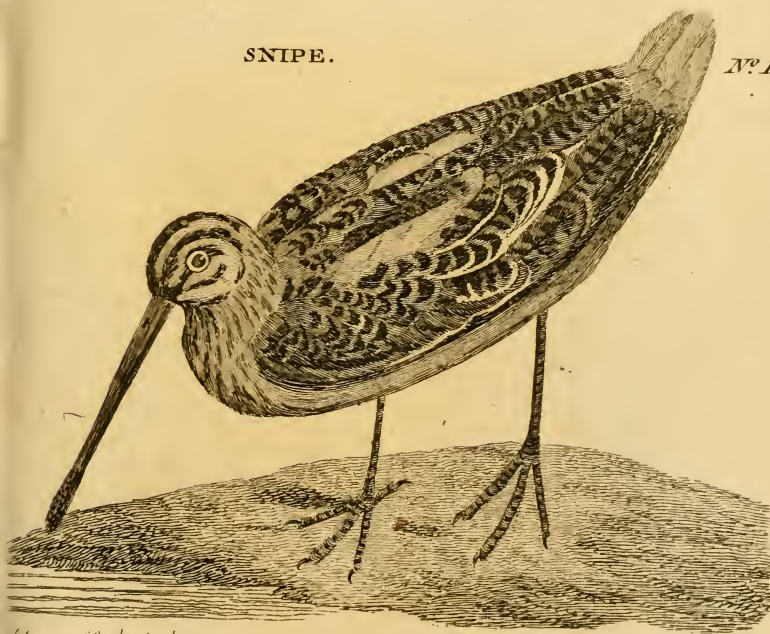
IN the winter time snipes are very frequent in all our marshy and wet grounds, where they lie concealed

JACK SNIPE.



SNIPE.

Nº 187



M. Griffith del

concealed in the rushes, &c. In the summer they disperse to different parts, and are found in the midst of our highest mountains, as well as our low moors: their nest is made of dried grass; they lay four eggs of a dirty olive color, marked with dusky spots; their young are so often found in *England*, that we doubt whether they ever entirely leave this island. When they are disturbed much, particularly in the breeding season, they soar to a vast height, making a singular bleating noise; and when they descend, dart down with vast rapidity: it is also amusing to observe the cock (while his mate sits on her eggs) poise himself on his wings, making sometimes a whistling and sometimes a drumming noise. Their food is the same with that of the woodcock; their flight very irregular and swift, and attended with a shrill scream. They are most universal birds, found in every quarter of the globe, and in all climates.

This species weighs four ounces; the length, to the end of the tail, is near twelve inches: the breadth about fourteen: the bill is three inches long, of a dusky color, flat at the end, and often rough like shagrin above and below. The head is divided lengthways with two black lines, and three of red, one of the last passing over the middle of the head, and one above each eye: between the bill and the eyes is a dusky line: the chin is white: the neck is varied with brown and red.

DESCRIP.

The scapulars are beautifully striped lengthways
with

with black and yellow: the quill-feathers are dusky, but the edge of the first is white, as are the tips of the secondary feathers: the quill-feathers next the back are barred with black and pale red: the breast and belly are white: the coverts of the tail are long, and almost cover it: they are of a reddish brown color. The tail consists of fourteen feathers; black on their lower part, then crossed with a broad bar of deep orange, another narrow one of black; and the ends white, or pale orange. The vent feathers a dull yellow; the legs pale green: the toes divided to their origin.

188. GREAT
SNIFE.

THIS species is rarely found in *England*. A fine specimen, shot in *Lancashire*, is preserved in the *Museum* of *Ashton Lever*, Esq.

The weight eight ounces. The head divided lengthways by a testaceous line, bounded on each side by another of black: above and beneath each eye is another: neck and breast of a yellowish white, finely marked with semicircular lines of black: belly, with cordated spots: sides undulated with black.

Back, coverts of wings, and scapulars testaceous, spotted with black and edged with white. Primaries dusky. Tail rust-colored, barred with black. Legs black?

- Gid, Jacksnipe, and Jud-
cock. *Wil. orn.* 291. Scolopax gallinula. *Lin. syst.* 189. JACK
244. SNIPE.
Raii syn. av. 105. *Danis Roer-Sneppe. Brunnich,*
La petite Beccassine. *Briffon* 163.
av. V. 303. *tab.* 26. *fig.* 2. Haar-Schnepfe, Pudel-Sch-
Pokerl. *Scopoli*, No. 139. nepfe, Kleinste Schnepfe.
Pizzardina. *Zinan.* 101. *Frisch*, II. 231.
Br. Zool. 121

THE haunts and food of this species are the same with those of the former; it also feeds on small snails: it is much less frequent among us, and very difficult to be found, lying so close as to hazard being trod on before it will rise: the flight is never distant, and its motion is more sluggish than that of the larger kind.

Its weight is less than two ounces, inferior by half to that of the snipe; for which reason the *French* call them *deux pour un*, we the *half snipe*. The dimensions bear not the same proportion; the length of the snipe being twelve inches; this eight and a half: the bill an inch and a half long: crown of the head black, tinged with rust color: over each eye is a yellow stroke; the neck varied with white, brown, and pale red. The scapular feathers narrow, very long, brown, bordered with yellow. The rump a glossy bluish purple: the

DESCRIP.

VOL. II. H h belly

JACK SNIP E. CLASS II.

belly and vent white; the greater quill-feathers dusky: the tail brown, edged with tawny; consisting of twelve pointed feathers: the legs are of a cinereous green.

BILL

BILL straight, slender, not an inch and half long.

NOSTRILS small.

TONGUE slender.

TOES divided; generally the two outmost connected at the bottom by a small membrane.

XXXI.
SAND-
PIPER*.

Le Vanneau, Dixhuit, Papechieu. *Belon* av. 209.

Zweiel. *Gesner* av. 765.

Pavonzino. *Aldr.* av. III. 202.

Pavoncella. *Olin.* 21.

Lapwing, bastard Plover, or Pewit. *Wil. orn.* 307.

Vanellus, le Vanneau. *Brifsen* av. V. 94. tab. 8. fig. 1.

Raii syn. av. 110.

Kiwik. *Kram.* 353. *Frisch.* II. 213.

Tringa vanellus. *Lin. syst.* 248.

Wipa, Kowipa, Blæcka. *Faun. Suec. sp.* 176

Danis Vibe, Kivit. *Brunnich,* 170.

Br. Zool. 122. *Scopoli,* No. 141.

190. LAP-
WING.

THIS elegant species inhabits most of the heaths and marshy grounds of this island. It lays four eggs, making a slight nest with a few bents. The eggs have an olive cast, and are spotted with black. It is worthy of notice, that among water fowl, congenerous birds lay the same number of eggs; for example, all of this tribe, also of the plo-

* This genus, the *Tringa* of *Linnaeus*, wanting an *English* name, we have given it that of the *Sandpipers*; most of the species being conversant about shores; and their note whistling or piping.

vers, lay four a-piece; the puffin genus only one; and the duck tribe, in general, are numerous layers, producing from eight to twenty.

The young as soon as hatched, run like chickens: the parents shew remarkable solicitude for them, flying with great anxiety and clamour near them, striking at either men or dogs that approach, and often flutter along the ground like a wounded bird, to a considerable distance from their nest, to elude their pursuers; and to aid the deceit, become more clamorous when most remote from it: the eggs are held in great esteem for their delicacy; and are sold by the *London* poulterers for three shillings the dozen. In winter, lapwings join in vast flocks; but at that season are very wild: their flesh is very good, their food being insects and worms. During *October* and *November*, they are taken in the fens in nets, in the same manner that *Ruffs* are, but are not preserved for fattening, being killed as soon as caught.

DESCRIP.

Their weight is about eight ounces: the length thirteen inches and a half: the breadth two feet and a half. The bill is black, and little more than an inch long: the crown of the head of a shining blackness: the crest of the same color, consisting of about twenty slender unwebbed feathers of unequal lengths, the longest are four inches: the cheeks and sides of the neck are white; but beneath each eye is a black line: the throat and fore part of the neck are black: the plumage on the hind part
mixed

mixed with white, ash-color and red: the back and scapulars are of a most elegant glossy green; and the latter finely varied with purple: the lesser covert feathers of the wings are of a resplendent black blue and green: the greater quill-feathers black, but the ends of the four first are marked with a white spot: the upper half of the lesser quill-feathers are black, the lower white: those next the body of the same colors with the scapulars: the breast and belly are white: the vent-feathers and the coverts of the tail orange color: the tail consists of twelve feathers; the outmost on each side is white, marked on the upper end of the inner web with a dusky spot; the upper half of all the others are black, tipped with a dirty white; their lower half of a pure white: the legs are red: the irides hazel.

The female is rather less than the male.

Merret, in his *Pinax*, p. 182. says, that there is in *Cornwall* a bird related to this; but less than a thrush, having blue feathers, and a long crest.

191. GREY. Le pluvier gris. *Belon av.* 262. *Vanellus griseus*, le Vanneau gris. *Briffon av.* v. 100. *tab.* 9. *fig.* 1.
 Pivier montano. *Aldr. av.* III. 207. Piviero montano. *Zinan.* 102.
Wil. orn. 309. *Bornbolmis* Floyte-Tyten,
Raii syn. av. 111. Dolken, *Brunnich*, 176.
Tringa squatarola. *Lin. syst.* Br. *Zool.* 122. *Scopoli*, No. 145.
Faun. Suec. sp. 186.

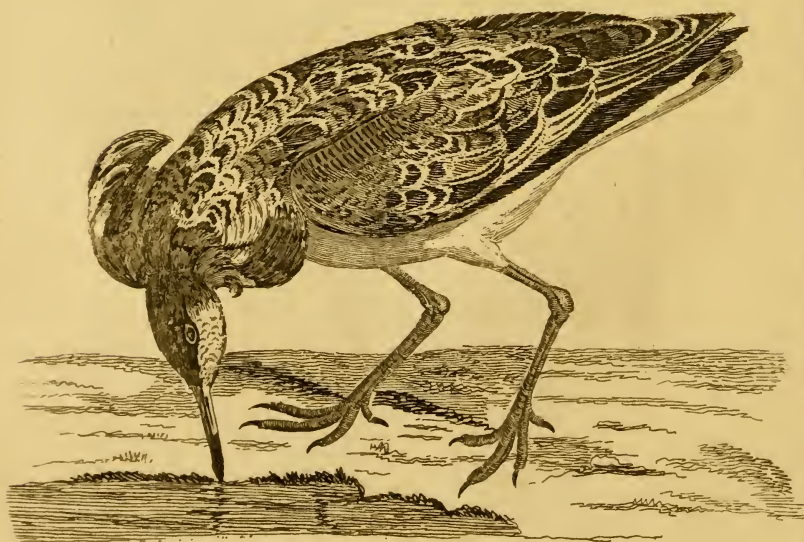
DESCRIP. IT weighs seven ounces: the length to the tip of the tail is twelve inches: the breadth twenty-four: the bill black, about an inch long, strong and thick: the head, back, and coverts of the wings black, edged with greenish ash-color, and some white: cheeks and throat white, marked with oblong dusky spots: the belly and thighs white: the exterior webs of the quill-feathers black: the lower part of the interior webs of the four first white: the rump white: the tail marked with transverse bars of black and white: the legs of a dirty green: the back toe very small.

These appear in small flocks in the winter time, but are not very common: their flesh is very delicate.



RUFF

Nº 192



- Avis pugnax.* *Aldr. av.* III. 167.
Wil. orn. 302.
Raii syn. av. 107.
Kroßler. *Kram.* 352.
Tringa pugnax. *Lin. syst.* 247.
Bruffhane. *Faun. Suec. sp.* 175.
Le Combattant, ou Paon de
- mer. Briffon av.* v. 240. 192. RUFF.
tab. 22.
Danis Bruuffhane. *Brunnich,*
 168.
Streitschnepfe, Rampfhæhn-
lein. *Frisch,* II. 232, 235.
Br. Zool. 123. *Scopoli,* No.
 140.

THE males, or *Ruffs*, assume such variety of colors in several parts of their plumage, that it is scarce possible to see two alike; but the great length of the feathers on the neck, that gives name to them, at once distinguishes these from all other birds. On the back of their necks is a singular tuft of feathers spreading wide on both sides. These, and the former, in some are black; in others white, yellow, or ferruginous; but this tuft and the ruffs frequently differ in colors in the same bird. The feathers that bear an uniformity of coloring through each individual of this sex, are the coverts of the wings, which are brown inclining to ash-color: the feathers on the breast, which are often black or dusky: the four exterior feathers of the tail, which are of a cinereous brown; and the four middle, which are barred with black and brown: the bill is black towards the end; red at the base. The legs in all, are yellow. In moulting they lose the character of the long neck-feathers,

DESCRIP.

nor do they recover it till after their return to the *fens* the spring following. It is then they regain that ornament, and at the same time a set of small pear shaped yellow pimples break out in great numbers on their face above the bill.

The *Stags* or male birds of the first year want these marks, and have sometimes been mistaken for a new species of *Tringa*; but they may be easily known by the colors of the coverts of the wings, and the middle feathers of the tail.

The older the birds are, the more numerous the pimples, and the fuller and longer the ruffs.

The length of the male to the tip of the tail is one foot, the breadth two; of the *Reeve* ten inches, the breadth nineteen: the weight of the former when just taken is seven ounces and a half; of the latter only four.

The *Reeves* never change their colors, which are pale brown: the back spotted with black, slightly edged with white: the tail brown; the middle feathers spotted with black: the breast and belly white: the legs of a pale-dull yellow.

These birds appear in the *fens* in the earliest spring, and disappear about *Michaelmas*. The *Reeves* lay four eggs in a tuft of grass, the first week in *May*, and sit about a month. The eggs are white, marked with large rusty spots. Fowlers avoid in general the taking of the females, not only because they are smaller than the males; but that they may be left to breed.

Soon

Soon after their arrival, the males begin to *bill*, that is to collect on some dry bank near a splash of water, in expectation of the females, who resort to them.

Each male keeps possession of a small piece of ground, which it runs round till the grass is worn quite away, and nothing but a naked circle is left. When a female lights, the ruffs immediately fall to fighting. I find a vulgar error, that ruffs must be fed in the dark lest they should destroy each other by fighting on admission of light. The truth is, every bird takes its stand in the room as it would in the open fen. If another invades its circle, an attack is made, and a battle ensues. They make use of the same action in fighting as a cock, place their bills to the ground and spread their ruffs. I have set a whole room full a fighting by making them move their stations; and after quitting the place, by peeping through a crevice, seen them resume their circles and grow pacific.

When a fowler discovers one of those *bills*, he places his net over night, which is of the same kind as those that are called *clap* or *day nets*, only it is generally single, and is about fourteen yards long and four broad.

The fowler resorts to his stand at day break, at the distance of one, two, three, or four hundred yards from the nets, according to the time of the season; for the later it is, the shyer the birds grow. He then makes his first pull, taking such
birds

birds that he finds within reach : after that he places his stuf birds or stales to entice those that are continually traversing the fen. An old fowler told me, he once caught forty-four birds at the first hawl, and in all six dozen that morning. When the stales are set, seldom more than two or three are taken at a time. A fowler will take forty or fifty dozens in a season.

These birds are found in *Lincolnshire*, the *Isle of Ely*, and in the east riding of *Yorkshire**; where they are taken in nets, and fattened for the table, with bread and milk, hempseed, and sometimes boiled wheat; but if expedition is required, sugar is added, which will make them in a fortnight's time a lump of fat: they then sell for two shillings or half a crown a piece. Judgement is required in taking the proper time for killing them, when they are at the highest pitch of fatness, for if that is neglected, the birds are apt to fall away. The method of killing them is by cutting off their head with a pair of scissars: the quantity of blood that issues is very great, considering the size of the bird. They are dressed like the woodcock, with their intestines; and, when killed at the critical time, say the *Epicures*, are reckoned the most delicious of all morsels.

* They visit a place called *Martin-Mere* in *Lancashire*, the latter end of *March* or beginning of *April*, but do not continue there above three weeks.

- | | |
|--|---|
| <i>Wil. orn.</i> 302. | <i>Islandis Sidlingar-Kall.</i> Nor- 193. KNOT. |
| <i>Raii syn. av.</i> 108. | <i>vegis FiærePist.</i> Fiær-Kurv, |
| <i>Edw. av.</i> 276. | Fiær-Muus. <i>Bornholmis</i> |
| <i>Le Canut. Briffon av.</i> V. | Rytteren. |
| 258. | <i>Brunnich,</i> <i>Tringa maritima.</i> |
| <i>Tringa canutus.</i> <i>Lin. syst.</i> | 182. |
| 251. | <i>Br. Zool.</i> 123. |
| <i>Faun. Suec. sp.</i> 183. | |

THE specimens that we had opportunity of examining, differ a little in colors, both from Mr. *Willughby's* description, and from Mr. *Edwards's* figure: the forehead, chin, and lower part of the neck in ours were brown, inclining to ash color: the back and scapulars deep brown, edged with ash color: the coverts of the wings with white, the edges of the lower order deeply so, forming a white bar: the breast, sides, and belly white; the two first streaked with brown: the coverts of the tail marked with white and dusky spots alternately: the tail ash colored, the outmost feather on each side white: the legs were of a bluish grey; and the toes, as a special mark, divided to the very bottom: the weight four ounces and a half.

DESCRIP.

These birds, when fattened, are preferred by some to the ruffs themselves. They are taken in great numbers on the coasts of *Lincolnshire*, in nets such as employed in taking ruffs; with two or three

three dozens of stales of wood painted like the birds, placed within: fourteen dozens have been taken at once. Their season is from the beginning of *August* to that of *November*. They disappear with the first frosts. *Camden** says they derive their name from king *Canute*, *Knute*, or *Knout*, as he is sometimes called; probably because they were a favorite dish with that monarch. We know that he kept the feast of the purification of the *Virgin Mary* with great pomp and magnificence at *Ely*, and this being one of the fen birds, it is not unlikely but he met with it there†. *Shakespeare* in his *Othello*, speaking of *Roderigo* (if Mr. *Theobald*'s reading is just) makes the *Knot* an emblem of a dupe:

“ I have rubb'd this young *Knot* almost to the sense ;
 “ And he grows angry.” *Othello*.

194. ASH
 COLORED.

Tringa cinerea. *Brunnich*,
ornith. 53.
Br. Zool. 124.

Braun und Weisbunter Sand-
 löuffer? *Frisch*, II. 237.

DESCRIP.

THIS species weighs five ounces: the length is ten inches: the breadth nineteen: the head is of a brownish ash color, spotted with black: the

* *Camden Brit.* 971.

† *Dugdale on embanking*, 185.

whole neck ash color, marked with dusky oblong streaks: the back and coverts of the wings elegantly varied with concentric semicircles of ash color, black and white: the coverts of the tail barred with black and white: the tail ash colored, edged with white: the breast and belly of a pure white: the legs of a greenish black: the toes bordered with a narrow membrane, finely scolloped.

These birds appear on the shores of *Flintshire*, in the winter time, in large flocks.

THIS species is in the collection of Mr. *Tunstal*, 195. BROWN. is of the size of a jack-snipe. The bill is black: the head, upper part of the neck, and back, are of a pale brown, spotted with black: coverts of the wings dusky, edged with dirty white: under side of the neck white, streaked with black: the belly white: tail cinereous: legs black.

Bought in the *London* market.

Spotted Tringa. <i>Edw. av.</i>	Tringa macularia. <i>Lin. syst.</i>	196. SPOT-
277.	249.	TED.
Turdus aquaticus, la Grive	Br. Zool. 124.	
d'Eau. <i>Brisson av.</i> V. 255.		

THIS bird is common to *Europe* and *America*; according to Mr. *Edwards's* figure, it is less than the preceding.

The

DESCRIP.

The bill is of the same colors with that of the red shank: the head, upper part of the neck, the back and coverts of the wings, are brown, inclining to olive, and marked with triangular black spots: above each eye is a white line: the greater quill-feathers are wholly black, the lesser tipped with white: the middle feathers of the tail are brown: the side feathers white, marked with dusky lines: the whole under side, from neck to tail, is white, marked with dusky spots: the female has none of these spots, except on the throat: the legs of a dusky flesh color. Mr. *Edwards* imagines these to be birds of passage; the bird he took his description from was shot in *Essex*.

197. BLACK.

MR. *Bolton* favored us with a description of this species shot in *Lincolnshire*.

DESCRIP.

It was the size of a thrush: the beak short, blunt at the point and dusky: the nostrils black: the irides yellow: the head small and flattened at top: the color white, most elegantly spotted with grey: the neck, shoulders, and back mottled in the same manner, but darker, being tinged with brown; in some lights these parts appeared of a perfect black and glossy: the wings were long: the quill-feathers black, crossed near their base with a white line: the throat, breast, and belly white, with faint brown and black spots of a longish

G A M B E T.



longish form, irregularly dispersed; but on the belly become larger and more round; the tail short, entirely white, except the two middle feathers, which are black: the legs long and slender, and of a reddish brown color.

Tringa Gambetta. *Lin. syst.* Totanus ruber. *Brissón, V.* 198. GAM-
248. *Faun. Suec.* No. 177. 192. *Scopoli, No.* 142. BET.
Gambetta. *Wil. orn.* 300. Tringa variegata. *Brunnich,*
Raii syn. av. 117. *Aldr. av.* No. 181.

THIS species is of the size of the *Green-shank*: the head, back, and breast cinereous brown, spotted with dull yellow: the coverts of the wings, scapulars, cinereous, edged with yellow: the primaries dusky: the shaft of the first feather white: belly white: tail dusky, bordered with yellow: legs yellow.

This species has been shot on the coast of *Lincolnshire*.

Turnstone, or Sea Dottrel. La Coulon-chaud, Arenaria. 199. TURN-
Wil. orn. 311. *Brissón av. V.* 132. STONE.
Cat. Carol. I. 72. Tringa Morinellus. *Lin. syst.*
Morinellus Marinus. *Raii* 249.
syn. av. 112. *Br. Zool.* 125.

THIS species is about the size of a thrush: the bill is an inch in length, a little prominent
on

on the top; is very strong; black at the tip, and at the base whitish: the forehead and throat are ash colored: the head, whole neck and coverts of the wings are of a deep brown, edged with a pale reddish brown: the scapular feathers are of the same color, very long, and cover the back: that and the rump are white; the last marked with a large triangular black spot: the tail consists of twelve feathers, their lower half is white, the upper black, and the tips white: the quill-feathers are dusky, but from the third or fourth the bottoms are white, which continually increases, till from about the nineteenth the feathers are entirely of that color: the legs are short and of an orange color.

These birds take their name from their method of searching for food, by turning up small stones with their strong bills to get at the insects that lurk under them. The bird we took our description from was shot in *Shropshire*. Mr. Ray observed them flying three or four in company on the coasts of *Cornwal* and *Merionethshire*: and Sir *Thomas Brown* of *Norwich* discovered them on the coast of *Norfolk*; communicating the picture of one to Mr. Ray, with the name of *Morinellus marinus*, or sea dottrel.

'Tringa interpres. *Ltn. Syst.* Edw. 141. 200 HEBRIDAL.
 248. *Faun. Suec.* No. 178. Arenaria, Le Coulon-chaud. DAL.
 Turnstone from *Hudson's Bay.* Briffon, V. 132.

THIS species is often shot in the north of Scotland, and its islands; also in *North America.*

Is of the size of a thrush: forehead, throat, and belly white: breast black: neck surrounded with a black collar; from thence another bounds the sides of the neck, and passes over the forehead: head and lower part of the neck behind white; the first streaked with dusky lines: back ferruginous, mixed with black: coverts of the tail white, crossed with a black bar: tail black, tipped with white: coverts of the wings cinereous brown; the lower order edged with white: primaries and secondaries black; the ends of the last white: tertials ferruginous and black: legs rather short, and of a full orange.

201. GREEN. *Cinclus*. *Belon av.* 216. *Faun. Succ. sp.* 180.
Gallinæ aquaticæ secunda species de nov. adject. Gef- *Le Beccasseau ou Cul-blanc,*
ner av. 511. *Tringa. Brisson av.* V.
Giarolo, Gearoncello. Aldr. *Danis* *Horſe-Gioeg. Islan-*
av. III. 185. *dis* *Hroſſagaukr. Norvegis*
The Tringa of Aldrovand. *Skodde Foll, Skod-de-*
Wil. orn. 300. *Fugl. Jordgeed. Makkre-*
Raii syn. av. 108. *Gouk, Ræs Jouke. Brun-*
Tringa ochropus. Lin. ſyſt. 251. *nich, 183.*
Weißpunotirto Sandlæuffer. Br. Zool. 125.
Frifch, II. 239.

DESCRIP.

THIS beautiful species is not very common in these kingdoms. The head and hind part of the neck are of a brownish ash color, streaked with white; the under part mottled with brown and white: the back, scapulars, and coverts of the wings are of a dusky green, glossy and resplendent as silk, and elegantly marked with small white spots: the lesser quill-feathers of the same colors: the under sides of the wings are black, marked with numerous white lines, pointing obliquely from the edges of the feather to the shaft, representing the letter V: the rump is white; the tail of the same color: the first feather plain, the second marked near the end with one black spot, the third and fourth with two, the fifth with three, and the sixth with four.

Except in pairing time, it is a solitary bird: it is never found near the sea; but frequents rivers, lakes, and other fresh waters. In *France* it is
 highly

highly esteemed for its delicate taste; and is taken with limed twigs placed near its haunts.

Mr. *Fleischer* favored us with a bird from *Denmark*, which, in all respects, resembled this, except that the spots were of a pale rust color. *Linnaeus* describes it under the title of *Tringa littorea*, *Faun. Suec. sp.* 185. but we believe it does not differ specifically from that above described.

Tringa Islandica. *Lin. syst.* Randbrislanger. *Brunnich*, 202. RED.
inter addenda. No. 180.
Tringa ferruginea Islandis

BIRDS of this species have appeared in great flocks on the coast of *Essex*, on the estate of Col. *Schutz*.

Crown of the head spotted with black and ferruginous. The lower side of the neck, the breast, and belly of a full ferruginous color: back marked with black and rust color: coverts of the wings ash color: legs black: bill strong, an inch and a half long: the whole length of the bird ten inches.

La Maubeche tachetée. *Briffon* V. 229?

203. ABER-
DEEN.

THIS was communicated by the late Doctor *David Skene* of *Aberdeen*.

I i 2

Bill

COMMON SANDPIPER. CLASS II.

Bill slender and black: head, back, lesser coverts of the wings, and the scapulars, of a dull ferruginous color, spotted with black: the greater coverts tipped with white: quill-feathers dusky, edged on the exterior side with white: breast reddish brown, mixed with dusky: belly and vent white: tail cinereous; two middle feathers longer than the rest: legs black; size of the former.

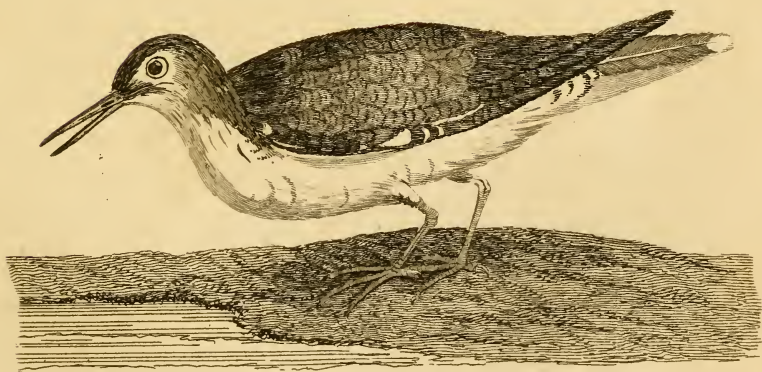
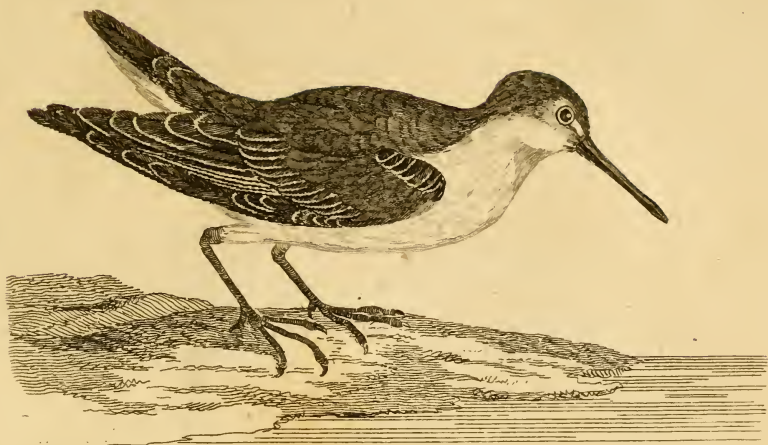
204. COMMON.

Gallinula hypoleucos (Fyfterlin). *Gesner av.* 509.
Alar. av. III. 182.
Wil. orn. 301.
Raii syn. av. 108.
Sandlaufferl. Kram. 353.
Tringa hypoleucos. Lin. syst. 250.
Snappa, Strandsittare. Faun. Suec. sp. 182.

Guinetta, la Guignette. Brisson av. V. 183. *tab.* 16. *fig.* 1.
Norvegis der lille Myrftikkel. Bornholms Virlen. Brunnich, 174.
Br. Zool. 125.
Martin's Scopoli, No. 143.

DESCRIP.

THIS species agrees with the former in its manners and haunts; but is more common: its note is louder and more piping than others of this genus. Its weight is about two ounces: the head is brown, streaked with downward black lines; the neck an obscure ash color: the back and coverts of the wings brown, mixed with a glossy green, elegantly marked with transverse dusky lines: over each eye is a white stroke: the breast and belly are of a pure white: the quill-feathers are brown, the first entirely so, the nine next marked on the inner web



SANDPIPER

web with a white spot: the middle feathers of the tail brown; edges spotted with black and pale red: the exterior tipt and barred with white: the legs of a dull pale green.

Wil. orn. 205.

Raii syn. av. 109.

Tringa alpina. Lin. syst. 249.

Faun. Suec. sp. 181.

La Beccassine d'Angleterre.

Briffon av. V. 309.

Danis Domsneppa, Ryle.

Brunnich, 167, & 173.

Kleinste Schnepfe, or Kleinste

Sandläuffer. Frisch, II.

241.

Br. Zool. 126. *tab. fig.* 2.

205. DUN-
LIN.

THIS species is at once distinguished from the others by the singularity of its colors. The back, head, and upper part of the neck are ferruginous, marked with large black spots: the lower part of the neck white, marked with short dusky streaks: the coverts of the wings ash color: the belly white, marked with large black spots, or with a black crescent pointing towards the thighs: the tail ash colored, the two middle feathers the darkest: legs black: toes divided to their origin. In size it is superior to that of a lark. These birds are found on our sea coasts; but may be reckoned among the more rare kinds. They lay four eggs of a dirty white color, blotched with brown round the thicker end, and marked with a few small spots of the same color on the smaller end. I received the eggs from *Denmark*; but as I have shot these birds in *May*, and again in *August*, on the shores of

DESCRIP.

Flintshire, suppose they breed with us ; but I never discovered their nest. They are common on the *Yorkshire* coasts, and esteemed a great delicacy.

206. PURRE. L'Allouette de Mer. *Belon* Stint, in *Suffex* the Ox-eye.
av. 213. *Raii syn. av.* 110.
 Cinclus sive Motacilla Mari- *N. Com. Petr.* IV. 428.
 tima, Lyfcklicker. *Gesner* L'Allouette de Mer, Cinclus.
av. 616. *Briffon av.* V. 211. *tab.* 19.
 Giarolo. *Aldr. av.* III. 188. *fig.* 1.
 The Stint. *Wil. orn.* 305. *Tringa cinclus. Lin. syst.* 251.
Br. Zool. 126.

DESCRIP.

THIS bird weighs about an ounce and a half : length seven inches and a half : extent fourteen inches : the head and hind part of the neck are ash colored, marked with dusky lines : a white stroke divides the bill and eyes : the chin white : under-side of the neck mottled with brown : the back is of a brownish ash color : the breast and belly white : the coverts of the wings and tail a dark brown, edged with light ash color or white : the greater coverts dusky, tipped with white : the upper part of the quill-feathers dusky, the lower white : the two middle feathers of the tail dusky, the rest of a pale ash color, edged with white : the legs of a dusky green ; the toes divided to their origin. The bill an inch and a half long, slender and black ; irides dusky.

These birds come in prodigious flocks on our sea

sea coasts during the winter: in their flight they perform their evolutions with great regularity; appearing like a white, or a dusky cloud, as they turn their backs or their breasts towards you. They leave our shores in spring, and retire to some unknown place to breed.

They were formerly a well known dish at our tables; known by the name of *Stints*.

THIS is the left of the genus, scarcely equal- 207. LITTLE.
ling a hedge sparrow in size. The head, upper side of the neck, the back, and coverts of the wings brown, edged with black and pale rusty brown. Breast and belly white.

The greater coverts dusky, tipped with white: the primaries and secondaries of the same colors. The tail dusky. Legs black.

This specimen was communicated to me by the Rev. Mr. Green, of *Trinity College, Cambridge*; and was shot near that place in *September*. It is common to *North America* and *Europe*.

XXXII.
PLOVER.

BILL strait, no longer than the head.

NOSTRILS linear.

TONGUE

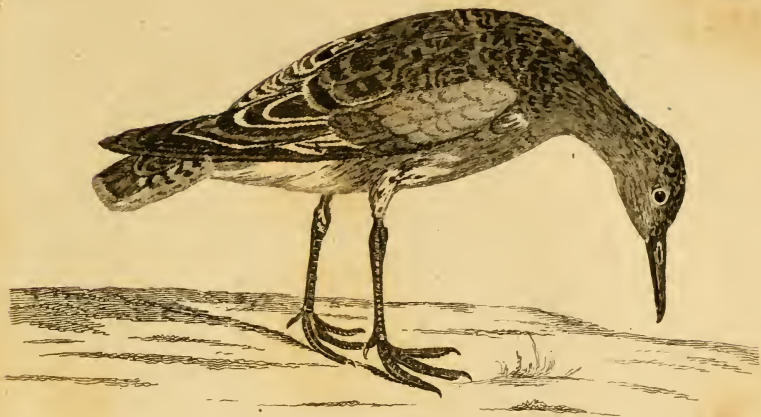
TOES, wants the hind toe.

208. GOLDEN. Le Pluvier Guillemot. *Belon* *Dalekarlis Akerhona, Lappis*
av. 260. *Hutti. Faun. Suec. sp.* 190.
 Pluvialis. *Gesner av.* 714. *Pluvialis aurea, le Pluvier doré.*
 Pivier. *Aldr. av.* III. 206. *Briffon av.* V. 43. *Tab.* 4.
Wil. orn. 308. *fig.* 1.
Rati syn. av. 111. *Piviero verde. Zinan.* 102.
 Brachhennl. *Kram.* 354. *Norvegis Akerloe, Cimbris*
 Rechter Brachvogel. *Frisch,* *Brok-Fugl. Brunnich,* 187.
 II. 217. *Br. Zool.* 128.
 Charadrius Pluvialis. *Lin.*
yst. 254.

THIS elegant species is often found on our moors and heaths, in the winter time, in small flocks. Its weight is nine ounces: its length eleven inches: its breadth twenty-four: the bill is short and black: the feathers on the head, back, and coverts of the wings are black, beautifully spotted on each side with light yellowish green: the breast brown, marked with greenish oblong strokes: the belly white; the middle feathers of the tail barred with black and yellowish green: the rest with black and brown: the legs black. We have observed some variety in these birds, but cannot determine whether it is owing to age or sex:

we

RED SAND-PIPER.



GOLDEN PLOVER.



we have seen some with black bellies, others with a mixture of black and white; others with bluish legs, and some with a small claw in the place of the hind toe.

They lay four eggs, sharply pointed at the lesser end, of a dirty white color, and irregularly marked, especially at the thicker end, with black blotches and spots. It breeds on several of our unfrequented mountains; and is very common on those of the isle of *Rum*, and others of the loftier *Hebrides*. They make a shrill whistling noise: and may be inticed within shot by a skilful imitator of the note,

This species, on account of its spots, has been supposed to have been the *Pardalis* of *Aristotle*: but his account of the bird makes no mention of that distinction: perhaps he thought that the name implied it. The *Romans* seem to have been unacquainted with the plover: for the name never once occurs in any of their writings. We derive it from the *French* *PLUVIER*, *pource qu'on le prend mieux en temps pluvieux qu'en nulle autre saison* *.

* *Belon Oyseaux*. 260.

209. LONG
LEGGED.

Le grand Chevalier d'Ita-
lie. *Belon Portr. d'Oy-
seaux*, 53.
Aldr. av. III. 176.
Gesner av. 546.
Himantopus. *Wil. orn.* 297.
Raii syn. av. 106.

Sibb. Scot. 19. *Tab.* 11. 13.
L' Echasse. *Briffon av.* V. 33.
Tab. 3. *fig.* 1.
Charadrius himantopus. *Lin.*
syft. 255. *Scopoli*, No. 148.
Br. Zool. 128. *add. plates.*

DESCRIP.

THIS is the most singular of the *British* birds. The legs are of a length, and weakness greatly disproportioned to the body, which is inferior in size to that of the green plover: this, added to the defect of the back toe, must render its paces aukward and infirm. The naked part of the thigh is three inches and a half long; the legs four and a half: these, and the feet are of a blood red: the bill is black, above two inches long. The length from its tip to the end of the tail is thirteen inches: the breadth from tip to tip of the wing twenty-nine inches: the forehead, and whole under side of the body are white: the crown of the head, back, and wings black: on the hind part of the neck are a few black spots: the tail is of a greyish white: the wings when closed extend far beyond it. These birds are extremely rare in these islands: Sir *Robert Sibbald* records a brace that were shot in *Scotland*: another was shot a few years ago on *Stanton-Harcourt* common near *Oxford*, and we have seen them



SANDERLING.



DOTTEREL.

them often in the cabinets of the curious at *Paris*, taken on the *French* coasts.

- | | | |
|--|---|-----------|
| Morinellus avis anglica. <i>Ges-</i> | Charadrius morinellus. <i>Lin.</i> | 210. DOT- |
| ner av. 615. | <i>lyst.</i> 254. | TREL. |
| <i>Wil. orn.</i> 309. | <i>Lappis</i> Lahul. <i>Faun. Suec. sp.</i> | |
| <i>Raii syn. av.</i> 111. | 188. | |
| <i>Camden. Brit.</i> I. 570. | <i>Caii opusc.</i> 96. | |
| Pluvialis minor, five mori- | <i>Cimbris</i> Pomerants Fugl. <i>Nor-</i> | |
| nellus, le petit Pluvier, | <i>vegis</i> Bold Ticet. <i>Mindre</i> | |
| ou le Guignard. <i>Briffon</i> | <i>Akerloc. Brunnich</i> , 185. | |
| av. V. 54. <i>Tab.</i> 4. <i>fig.</i> 2. | <i>Br. Zool.</i> 129. | |

THE female dottrel, according to Mr. *Willugh-*
by, weighs more than four ounces; the male
 above half an ounce less. The length of the female
 ten inches; the breadth nineteen and a half: the
 male not so large. The bill black, slender, de-
 pressed in the middle, and not an inch long: the
 forehead, top and back of the head black, the
 former spotted with white; a broad white stroke
 that presses over the eyes, surrounds the whole:
 the cheeks and throat are white: the neck of a
 cinereous olive color: the middle of the feathers of
 the back, and coverts of the wings and tail olive;
 but their edges of a dull deep yellow: the quill-
 feathers are brown, with brown shafts; but the ex-
 terior side and the shaft of the first feather is
 white. The tail consists of twelve feathers of a
 brown olive color, barred near their ends with
 black,

DESCRIP.

black, and tipped with white. The breast and sides are of a dull orange color; but immediately above that is a line of white, bounded above with a very narrow one of black. The belly (in the male) is black: thighs and vent-feathers white: legs yellowish green: toes dusky.

FEMALE.

The colors of the female in general are duller: the white over the eye is less; and the crown of the head is mottled with brown and white. The white line across the breast is wanting. The belly is mixed with black and white.

PLACE.

These birds are found in *Cambridgeshire*, *Lincolnshire*, and *Derbyshire*: on *Lincoln-heath*, and on the moors of *Derbyshire* they are migratory, appearing there in small flocks of eight or ten only in the latter end of *April*, and stay there all *May* and part of *June*, during which time they are very fat, and much esteemed for their delicate flavor. In the months of *April* and *September* they are taken on the *Wiltshire* and *Berkshire* downs: they are also found in the beginning of the former month on the sea side at *Meales* in *Lancashire*, and continue there about three weeks, attending the barley fallows: from thence they remove northward to a place called *Leyton Hawes*, and stay there about a fortnight; but where they breed, or where they reside during winter, we have not been able to discover. They are reckoned very foolish birds, so that a dull fellow is proverbially called a *Dottrel*. They were also believed to mimick the action of the

the fowler; to stretch out a wing when he stretched out an arm, &c. continuing their imitation, regardless of the net that was spreading for them.

To this method of taking them, *Michael Drayton* alludes in his panegyrical verses on *Coryate's Crudities* :

Most worthy man with thee it is even thus,
As men take *Dottrels*, so hast thou ta'en us;
Which as a man his arme or leg doth set,
So this fond bird will likewise counterfeit.

At present, sportsmen watch the arrival of the *Dottrels*, and shoot them; the other method having been long disused.

Charadrius five hiaticula.

Aldr. av. III. 207.

Wil. orn. 310.

Raii syn. av. 112.

Griesshennl. *Kram.* 354.

Charadrius hiaticula. *Lin. syst.*

253. *Scopoli*, No. 147.

Strandpipare, Grylle, Trulls,

Lappis Pago. *Faun. Succ.*

sp. 187.

Pluvialis torquata minor, le 211. RINGED
petit Pluvier a collier.

Briffon av. V. 63. *Tab.*

5. *fig.* 2.

Bornbolmis Præste-Krave,

Sand-Vrifter. *Brunnich*,

184. *Frisch*, II. 214.

Sea Lark. *Br. Zool.* II. 383.

IT weighs near two ounces. The length is seven inches and a half; the breadth sixteen: the bill is half an inch long; the upper half orange color; the lower black; from it to the eyes is a black

DESCRIP.

black line; the cheeks are of the same color; the forehead white, bounded by a black band that passes over from eye to eye; the crown of the head is of a fine light brown; the upper part of the neck is incircled with a white collar; the lower part with a black one; the back and coverts of the wings of a light brown; the breast and belly white; the tail brown, tipped with a darker shade; the legs yellow.

These birds frequent our shores in the summer, but are not numerous. They lay four eggs of a dull whitish color, sparingly sprinkled with black: at approach of winter they disappear.

212. SAND-
ERLING.

Sanderling, or Curwillet.

Wil. orn. 303.

Raii syn. av. 109.

Towillee. *Borlase hist. Corn-*
wal. 247.

Calidris grisea minor, la pe-

tite Maubeche grise. *Briffon*

av. V. 236. *Tab.* 20.

fig. 2.

Charadrius Caladris. Lin. syst.

255.

Br. Zool. 129. *add. plates.*

DESCRIP.

WE have received this species out of *Lancashire*; but it is found in greater plenty on the *Cornish* shores, where they fly in flocks. The sanderling weighs little more than one ounce three quarters. Its length is eight inches; extent fifteen. Its body is of a more slender form than others of the genus. The bill is an inch long, weak and black. The head, and hind part of the neck are ash-

ash-colored, marked with oblong black streaks; the back and scapulars are of a brownish grey, edged with dirty white; the coverts of the wings, and upper parts of the quill-feathers dusky: the whole under side of the body is white; in some slightly clouded with brown. The tail consists of twelve sharp pointed feathers of a deep ash color; the legs are black.

BILL

XXXIII.
OYSTER
CATCHER.

BILL long, compressed, the end cuneated.

NOSTRILS linear.

TONGUE, a third the length of the bill.

TOES, only three.

213. PIED. La Pie, Becasse de mer. *Belon av.* 203. *Pica marina. Caii opusc.* 62.
Hæmatopus. Gesner av. 548. *N. Com. Petr.* IV. 425.
Aldr. av. III. 176. Tirma, or Trillichan. *Martin's voy.* St. Kilda. 35.
Wil. orn. 297. *Islandis mas Tialldur, fœmina*
Raii syn. av. 105. Tilldra. *Feroensibus* Kiel-
L'Hutrier, Pie de mer. Bris- der. *Norvegis* Tield v. Kield,
son av. V. 38. tab. 3. fig. 1. Glib, Strand-Skiure. *Danis*
The Oyster Catcher. *Cat.* Strand-Skade. *Brunnich,*
Carol. I. 85. *Hæmatopus* 189.
ostralegus. Lin. syst. 257. *Br. Zool.* 127.
Marfpitt, Strandskjura, *Faun.*
Suec. sp. 192.

SEA Pies are very common on most of our coasts; feeding on marine insects, oysters, limpets, &c. Their bills, which are compressed sideways, and end obtusely, are very fit instruments to insinuate between the limpet and the rock those shells adhere to; which they do with great dexterity to get at the fish. On the coast of *France*, where the tides recede so far as to leave the beds of oysters bare, these birds feed on them; forcing the shells open with their bills. They keep in summer time in pairs, laying their eggs on the bare ground: they

OYSTER - CATCHER.



they lay four of a whitish brown hue, thinly spotted and striped with black : when any one approaches their young, they make a loud and shrill noise. In winter they assemble in vast flocks, and are very wild.

Weight sixteen ounces ; length seventeen inches. Bill three inches, compressed, obtuse at the end, of a rich orange color : *irides* crimson : edges of the eye-lids orange ; beneath the lower a white spot. Head, neck, scapulars, and coverts of the wings a fine black ; in some the neck marked with white : wings dusky, with a broad transverse band of white : the back, breast, belly, and thighs white : tail short, consists of twelve feathers ; the lower half white ; the end black : legs thick and strong ; of a dirty flesh color : middle toe connected to the exterior toe as far as the first joint by a strong membrane : the claws dusky, short and flat.

DESCRIP.

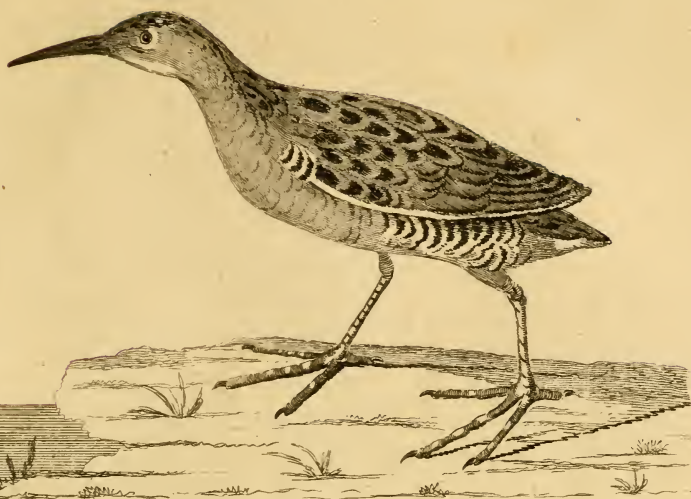
- XXXIV. BILL slender, a little compressed, and slightly
RAIL. incurvated.
NOSTRILS small.
TONGUE rough at the end.
TAIL very short.

214. WATER. Le Rasle noir. *Belon av.* 112. *Rallus aquaticus. Lin. syst.*
Gallina cinerea (ashhunlin): 262.
Gefner av. 515. *Faun. Suec. sp.* 195.
Ralla aquatica. *Aldr. av.* *Rallus aquaticus, le Rasle*
III. 179. *d'Eau. Brisson av.* 151. *tab.*
Water-rail, Bilcock, or Brook 12. *fig. 2. Scopoli, No.* 155.
Ouzel. *Wil. orn.* 314. *Norvegis Vand-Rixe. Feroen-*
sibus Jord-Koene. Brunnich,
Raii syn. av. 113. 193.
Wasser hennl *Kram.* 348. *Br. Zool.* 130.

THE water rail is a bird of a long slender body, with short concave wings. It delights less in flying than running; which it does very swiftly along the edges of brooks covered with bushes: as it runs, every now and then flirts up its tail; and in flying hangs down its legs: actions it has in common with the water hen.

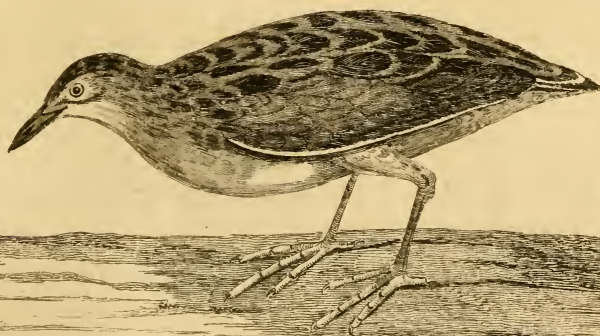
- DESCRIP. Its weight is four ounces and a half. The length to the end of the tail twelve inches: the breadth sixteen. The bill is slender, slightly incurvated, one inch three quarters long: the upper mandible black, edged with red; the lower orange colored: the

WATER - RAIL.



CRAKE GALLINULE.

Nº 215.



the irides red: the head, hind part of the neck, the back, and coverts of the wings and tail are black, edged with an olive brown; the base of the wing is white; the quill-feathers and secondaries dusky: the throat, breast, and upper part of the belly are ash-colored: the sides under the wings as far as the rump finely varied with black and white bars. The tail is very short, consists of twelve black feathers; the ends of the two middle tipped with rust-color; the feathers immediately beneath the tail white. The legs are placed far behind, and are of a dusky flesh-color. The toes very long, and divided to their very origin; though the feet are not webbed, it takes the water; will swim on it with much ease; but oftener is observed to run along the surface.

This bird is properly *sui generis*, agreeing with no other, so forms a separate tribe. M. *Briffon* and *Linnaeus* place it with the land Rail, and Mr. *Ray* with the water hens, which have their peculiar characters, so very distinct from the Rail, as to constitute another genus, as may be observed in the generical table preceding this class.

XXXV.
GALLI-
NULE.

BILL thick at the base sloping to the point, the upper mandible reaching far up the forehead, callous.

WINGS short and concave.

BODY compressed.

TOES long, divided to the origin.

215. SPOT-
TED.

Gallinula ochra (Wykernell). *Gesner. av.* 513.

Porcellana, Porzana, Grugnetto. *Aldr. av.* III. 181.

Grinetta. *Wil. orn. sp.* 8. p. 315.

Rall syn. av. 115. *sp.* 7.

Rallus aquat. minor, five *Maruetta*, le petit *Ralle d'Eau*, ou la *Marouette*.

Briffon av. V. 155. *tab.* 13. *fig.* 1.

Couchouan ou *Marouette*. *Argenv. Lithol.* 533. *tab.* 25.

Kleines gesprenkeltes Wasserhuhn. *Frisch*, II. 211.

Rallus porzana. *Lin. syst.* 262.

Br. Zool. 130.

DESCRIP.

THIS species is not very frequent in *Great Britain*, and is said to be migratory. Inhabits the sides of small streams, concealing itself among the bushes. Its length is nine inches; its breadth fifteen: its weight four ounces five drachms. The head is brown, spotted with black; the neck a deep olive, spotted with white; from the bill beyond the eyes is a broad grey bar: the feathers of the back are black next their shafts, then olive colored, and edged with white: the scapulars are olive, finely

finely marked with two small white spots on each web: the legs of a yellowish green.

- | | |
|---|---|
| Le Rasle rouge ou de Genet. | les. <i>Briffon av.</i> V. 159. 216. CRAKE. |
| <i>Belon av.</i> 212. | <i>Tab.</i> 13. <i>fig.</i> 2. |
| Ortygometra, Crex. <i>Gesner</i> | Wachtel-konig. <i>Kram.</i> 349. |
| <i>av.</i> 361, 362. | Rallus Crex. <i>Lin. syst.</i> 261. |
| <i>Aldr. av.</i> III. 179. | Angsnarpa, Korknarr, Sey- |
| Rail, or Daker Hen. <i>Wil.</i> | dreifwer. <i>Faun. Suec. sp.</i> |
| <i>orn.</i> 170. <i>Phil. Transf.</i> II. | 194. |
| 853. | <i>Danis & Norv.</i> Vagtel-Konge. |
| <i>Rail syn. av.</i> 58. | Aker-Rixe. Skov-Snarre, |
| Corn-crek. <i>Sib. Scot.</i> 16. | <i>Norvegis quibusdam</i> Ager- |
| Corn-craker. <i>Martin's West.</i> | hoene. <i>Brunnich,</i> 192. |
| <i>Isles,</i> 71. | <i>Br. Zool.</i> 131. |
| Rallus genistarum, le Rasle | Rostz. <i>Scopoli,</i> No. 154. |
| de Genet, ou Roi des Cail- | |

THIS species has been supposed by some to be the same with the water rail, and that it differs only by a change of color at a certain season of the year: this error is owing to inattention to their characters and nature, both which differ entirely. The bill of this species is short, strong, and thick; formed exactly like that of the water hen, and makes a generical distinction. It never frequents watery places, but is always found among corn, grass, broom, or furze. It quits this kingdom before winter; but the water rail endures our sharpest seasons. They agree in their aversion to flight; and the legs, which are remarkably long for the size of the bird, hang down whilst

they are on the wing; they trust their safety to their swiftness of foot, and seldom are sprung a second time but with great difficulty. The land rail lays from twelve to twenty eggs, of a dull white color, marked with a few yellow spots; notwithstanding this, they are not very numerous in this kingdom. Their note is singular, resembling the word *Crex* often repeated. They are in greatest plenty in *Anglesea*, where they appear about the twentieth of *April*, supposed to pass over from *Ireland*, where they abound: at their first arrival it is common to shoot seven or eight in a morning. They are found in most of the *Hebrides*, and the *Orknies*. On their arrival they are very lean, weighing only six ounces; but before they leave this island, grow so fat as to weigh above eight.

DESCRIP. The feathers on the crown of the head, hind part of the neck, and the back, are black, edged with bay color: the coverts of the wings of the same color; but not spotted: the tail is short, and of a deep bay; the belly white: the legs ash-colored.

La Poulette d'eau. <i>Belon</i> av. 211.	Gallinella aquatica, Porzane. <i>Zinac.</i> 109.	217. COMMON.
Ein wasserhen. <i>Gesner</i> av. 501.	Wasserhennl. <i>Kram.</i> 358.	
Chloropus major nostra. <i>Aldr.</i> av. III. 177.	Rothbläufige Kleine Wasserhuhn. <i>Frisch</i> , II. 209.	
Common Water-hen, or Moorhen. <i>Wil. orn.</i> 312.	Falica chloropus. <i>Lin. syst.</i> 258.	
<i>Raii syn. av.</i> 112.	<i>Brunnich</i> , 191. <i>Scopoli</i> , No. 153.	
Gallinula, la Poule d'eau. <i>Briffon</i> av. VI. 3. <i>Tab.</i> 1.	<i>Br. Zool.</i> 131.	

THE male of this species weighs about fifteen ounces. Its length to the end of the tail fourteen inches: the breadth twenty-two. The crown of the head, hind part of the neck, the back, and coverts of the wings are of a fine, but very deep olive green. Under side of the body cinereous: the chin and belly mottled with white: quail-feathers and tail dusky: exterior side of the first primary feather, and the ridge of the wings white: vent black: feathers just beneath the tail white: legs dusky green. The colors of the plumage in the female, are much less brilliant than that of the male: in size it is also inferior. Mr. *Willughby* in his description takes no notice of the beautiful olive gloss of the plumage of these birds; nor that the bill assumes a fuller and brighter red in the courting season.

DESCRIBED.

It gets its food on grassy banks, and borders near

K k 4

fresh

EGGS.

fresh waters, and in the very waters, if they be weedy. It builds upon low trees and shrubs by the water side; breeding twice or thrice in the summer; and when the young are grown up, drives them away to shift for themselves. They lay seven eggs of a dirty white color, thinly spotted with rust color. It strikes with its bill like a hen; and in the spring has a shrill call. In flying it hangs down its legs: in running often flirts up its tail, and shews the white feathers. We may observe, that the bottoms of its toes are so very flat and broad (to enable it to swim) that it seems the bird that connects the cloven-footed aquatics with the next tribe; the fin toed.



RED AND GREY, SCOLLOP TOED SAND-PIPER.



SECT. II. FIN-FOOTED
BIRDS.

BILL strait and slender.

NOSTRILS minute.

BODY and LEGS like the Sandpiper.

TOES furnished with scalloped membranes.

XXXVI.
PHALA-
ROPE.

Grey Coot footed Tringa. *Tringa Lobata. Lin. syst. 249. 218. GREY.*
Edw. av. 308. Faun. Succ. sp. 179.
Phil. Transf. Vol. 50. Brunnich, 171.
 Le Phalarope. *Briffon av. Br. Zool. 126.*
 VI. 12.

THIS is about the size of the common *Purre*, DESCRIP.
 weighing one ounce. The bill black, not quite an inch long, flatted on the top, and channeled on each side; and the nostrils are placed in the channels: the eyes are placed remarkably high in the head: the forehead white: the crown of the head covered with a patch of a dusky hue, spotted with white and a pale reddish brown; the rest of the head, and whole under part of the neck and body are white: the upper part of the neck of a light grey: the back and rump a deep dove color, marked with dusky spots: the edges of the scapulars

pulars are dull yellow: the coverts dusky; the lower or larger tip and edged with white: the eight first quill-feathers dusky; the shafts white; the lower part of the interior side white: the smaller quill-feathers are tip with white: the wings closed, reach beyond the tail: the feathers on the back are either wholly grey or black, edged on each side with a pale red: the tail dusky, edged with ash-color: the legs are of a lead color: the toes extremely singular, being edged with scolloped membranes like the coot: four scollops on the exterior toe, two on the middle, and the same on the interior; each finely serrated on their edges.

This bird was shot in *Yorkshire*, and communicated to us by Mr. *Edwards*.

219. RED. Mr. *Johnson's* small cloven footed Gull. *Wil. orn.* 355. *Larus fidipes alter nostras.*
Ray's collection of *English* words, &c. p. 92. *Raii syn. av.* 132.
Edw. av. 143.
Tringa hyperborea. Lin. syst.
 249.

THIS species was shot on the banks of a fresh water pool on the isle of *Stronsa*, May 1769.

It is of the size of the Purre. The bill is an inch long, black, very slender, and strait almost to the end which bends downwards: the crown of the head, the hind part of the neck and the coverts of the wings are of a deep lead color; the back and scapulars

scapulars the same, striped with dirty yellow: the quill-feathers dusky; the shafts white: cross the greater coverts is a stripe of white: the chin and throat white: the under part and sides of the neck bright ferruginous: the breast dark, cinereous: belly white: coverts of the tail barred with black and white; tail short, cinereous: legs and feet black.

Mr. *Ray* saw this species at *Brignal* in *Yorkshire*: Mr. *Edwards* received the same kind from *North America*, being common to the *North* of *Europe* and *America*.

XXXVII. Short thick BILL, with a callus extending up the
COOT. forehead.

NOSTRILS narrow and pervious.

TOES furnished with broad scalloped membranes.

220. COM-
MON.

La Poulle d'eau. *Belon av.* 181. Rohr-hennl, *Blasfl. Kram.* 357.

Fulica recentiorum. *Gesner av.* 390. Weißblässige grosse Wasserhuhn. *Frisch*, II. 208.

Follega, Follata, Fulca. *Aldr.* *Fulica atra.* *Lin. syst.* 257. *Blas-klacka.* *Faun. Suec. sp.* 193.

Wil. orn. 319. *Raii syn. av.* 116. *Danis Vänd-Hoene, Bles-*

La Foulque, ou Morrelle. *Hoene. Brunnich*, 190.

Briffon av. VI. 23. tab. 2. *Br. Zool.* 132.

fig. 1. *Liska. Scopoli*, No. 149.

Folaga, o Polon. *Zinan.* 108.

DESCRIP.

THESE birds weigh from twenty-four to twenty-eight ounces. Their belly is ash-colored; and on the ridge of each wing is a line of white: every part besides is of a deep black: the legs are of a yellowish green: above the knee is a yellow spot.

Coots frequent lakes and still rivers: they make their nest among the rushes, with grafs, reeds, &c. floating on the water, so as to rise and fall with it. They lay five or six large eggs, of a dirty whitish hue, sprinkled over with minute deep rust color spots; and we have been credibly informed that
they



COMMON GALLINULE.



COOT.

they will sometimes lay fourteen and more. The young when just hatched are very deformed, and the head mixed with a red coarse down. In winter they often repair to the sea: we have seen the channel near *Southampton* covered with them: they are often brought to that market, where they are exposed to sale, without their feathers, and scalded like pigs. We once saw at *Spalding*, in *Lincolnshire*, a coot shot near that place that was white, except a few of the feathers in the wings, and about the head.

Fulica aterrima. *Lin.* 258. *La grand foulque ou la* 221. **GREAT.**
Scopoli, No. 150. *Macroule.* *Briffon av.* VI.
 Greater Coot. *Wil. orn.* 320. 28.
Belon 182.

THIS species differs from the preceding only in its superior size; and the exquisite blackness of the plumage.

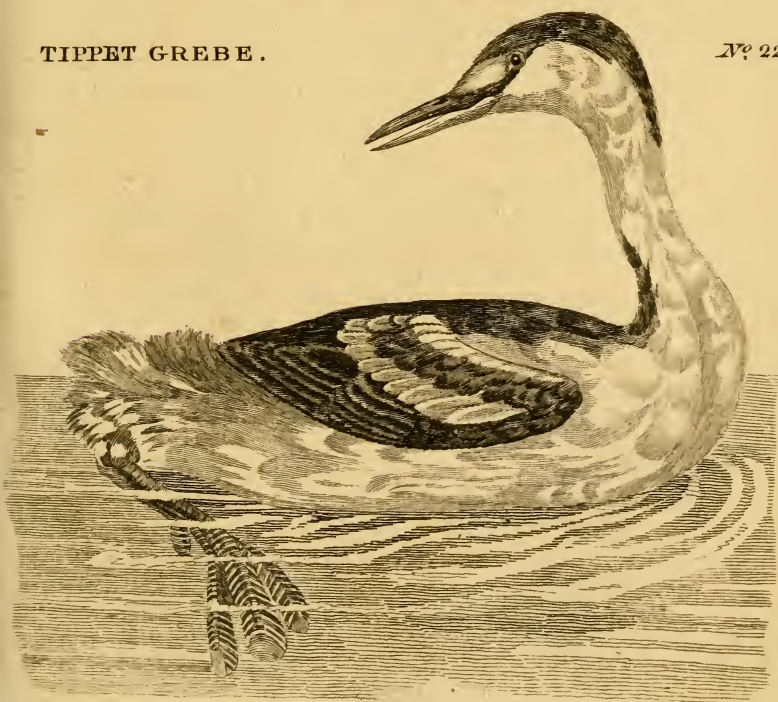
Discovered in *Lancashire* and in *Scotland*.

DUSKY GREBE.



TIPPET GREBE.

Nº 222.





The under side of them being drest with the feathers on, are made into muffs and tippetts; each bird sells for about fourteen shillings.

Grand Plongeon de riviere.

Belon av. 178.

Ducchel. *Gesner av.* 138.

Aldr. av. III. 104.

Avis pugnax 8va. *Aldr.* 169.

Greater crested and horned

Doucker. *Wil. orn.* 340.

Ash-colored Loon of Dr.

Brown, ibid. Raii syn. av.

124.

Plott's hist. Staff. 229. *tab.* 22.

The Cargoose. *Charleton ex.*

107.

Pet. Gaz. I. *tab.* 43. *fig.* 12.

Colymbus cristatus. Lin. syst.

222. *Scopoli, No.* 99.

Faun. Succ. sp. 151.

La Grebe hupée. *Briffon av.*

VI. 38. *tab.* 4. et *Colym-*

bus cornutus. 45. *tab.* 5.

fig. 1.

Smergo, Fisolio marino. Zinan.

107.

Danis Topped og Halskraved

Dykker, Topped Hav

Skicere. Brunnich, 135.

Gehoernter Seeahn, Noerike.

Frisch, II. 183.

Br. Zool. 132.

223. GREAT
CRESTED.

THIS species weighs two pounds and a half.

DESCRIP.

Its length is twenty-one inches: the breadth thirty: the bill is two inches one-fourth long; red at the base; black at the point: between the bill and the eyes is a stripe of black naked skin: the irides are of a fine pale red: the tongue is a third-part shorter than the bill, slender, hard at the end, and a little divided: on the head is a large dusky crest, separated in the middle. The cheeks and throat are surrounded with a long pendent ruff, of a bright tawny color, edged with black: the chin is white: from the bill to the eye is a black line,

line, and above that a white one : the hind part of the neck, and the back are of a footy hue : the rump, for it wants a tail, is covered with long soft down.

The covert feathers on the second and third joints of the wing, and the under coverts are white : all the other wing feathers, except the secondaries, are dusky, those being white : the breast and belly are of a most beautiful silvery white, glossy as satin, and equal in elegance to those of the *Grebe* of *Geneva* ; and are applied to the same uses : the plumage under the wings is dusky, blended with tawny : the outside of the legs, and the bottom of the feet are dusky : the inside of the legs, and the toes of a pale green.

These birds frequent the *Meres* of *Shropshire* and *Cheshire*, where they breed ; and in the great *East Fen* in *Lincolnshire*, where they are called *Gaunts*. Their skins are made into tippets, which are sold at as high a price as those that come from *Geneva*.

This species lays four eggs, white, and of the size of those of a pigeon ; the nest is formed of the roots of bugbane, stalks of water lily, pond weed and water violet, floating independent among the reeds and flags ; the water penetrates it, and the bird sits and hatches the eggs in that wet condition ; the nest is sometimes blown from among the flags into the middle of the water : in these circumstances, the fable of the *Halcyon's* nest, its

fluviivaga

fluëtivaga domus, as *Statius* expresses it, may in some measure be vindicated.

Fluëtivagam sic sæpe domum, madidosque penates

Halcyone deferta gemit ; cum pignora sævus

Auster, et argentes rapuit Thetis invida nidos.

Thebaid. lib. ix. 360.

It is a careful nurse of its young, being observed to feed them most assiduously, commonly with small eels; and when the infant brood are tired, will carry them either on its back or under its wings. This bird preys on fish, and is almost perpetually diving: it does not shew much more than the head above water, and is very difficult to be shot, as it darts down on the appearance of the least danger. It is never seen on land; and though disturbed ever so often, will not fly farther than the end of the lake. Its skin is out of season about *February*, losing then its bright color: and in the breeding time its breast is almost bare. The flesh of this bird is excessively rank: but the fat is of great virtue in rheumatic pains, cramps and paralytic contractions.

224. EARED. Eared dobchick. *Edw. av. Norvegis* Sav-Orre, Soe-Orre.
 96. *fig. 2.* *Bornholmis* Soe-Hoene. *If-*
La Grebe a Oreilles. *Briffon* *landis* Flauekitt. *Brunnich,*
av. VI. 54. 136.
Colymbus auritus. *Lin. syst.* *Br. Zool.* 133.
 223. *Scopoli*, No. 100.

DESCRIP.

THE length of this species to the rump is one foot; the extent twenty-two inches: the bill black, slender and very slightly recurvated: the *irides* crimson: the head and neck are black; the throat spotted with white: the whole upper side of a blackish brown, except the ridge of the wing about the first joint, and the secondary feathers, which are white: the breast, belly, and inner coverts of the wings are white: the subaxillary feathers, and some on the side of the rump, furruginous: behind the eyes, on each side, is a tuft of long loose rust colored feathers, hanging backwards: the legs of a dusky green.

These birds inhabit the fens near *Spalding*, where they breed. I have seen both male and female, but could not observe any external difference. They make their nest not unlike that of the crested grebe; and lay four or five small white eggs.

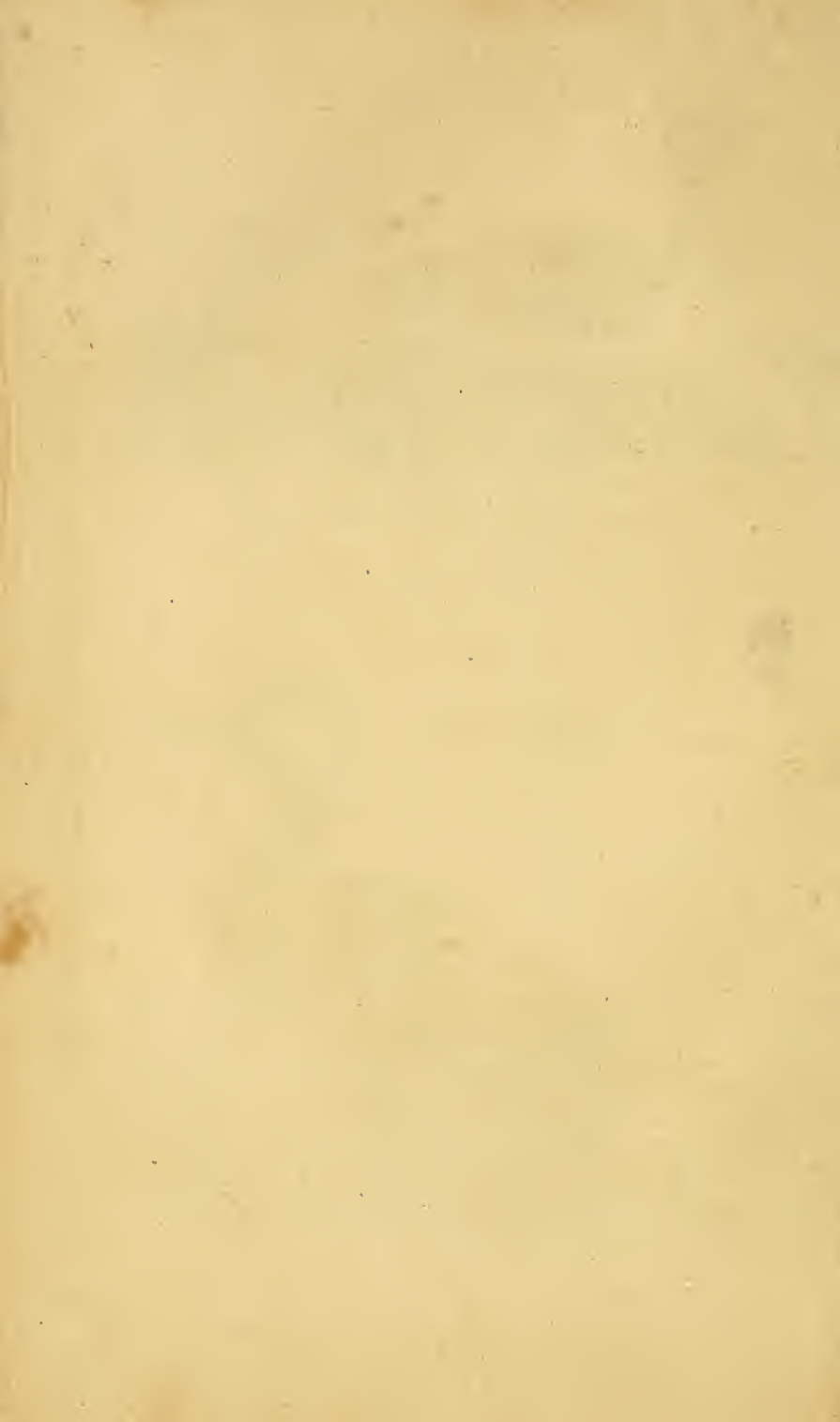
BLACK CHIN GREBE.



EARED GREBE.

Nº 228.





The black and white Dobchick. *Edw. av.* 96. *fig.* 1. *Colymbus minor*, la petite Grebe. *Briffon av.* VI. 56.

Br. Zool. 133.

Colymbus nigricans? *Scopoli*, No. 101.

225. DUSKY.

THE length from the bill to the rump eleven inches: the extent of wings twenty: the bill was little more than an inch long. The crown of the head, and whole upper side of the body dusky: the inner coverts, the ridge of the wing, and the middle quill-feathers were white; the rest of the wing dusky: a bare skin of a fine red color joined the bill to the eye: the whole underside from the breast to the rump was a silvery white: on the thighs were a few black spots. In some birds the whole neck was ash colored: so probably they might have been young birds, or different in sex. Inhabits the Fens of *Lincolnshire*.

DESCRIP.

Le Castagneux, ou Zoucet. *Raii syn. av.* 125.
Belon av. 177. *Colymbus fluviatilis*, la Grebe
 Mergulus fluviatilis (Duchelin, Arsfufs). *Gesner* de Riviere, ou le Castagneux. *Briffon av.* VI. 59.
av. 141. *Colymbus auritus.* *Lin. syst.*
 Trapazorola arzauolo, Piombin. *Aldr. av.* III. 105. 223.
 Didapper, Dipper, Dobchick, small Doucker, Loon, *Kleiner Seehahn*, or Noerike. *Frisch*, II. 184.
 or Arsfoot. *Wil orn.* 340. *Faun. Suec. sp.* 152.
Br. Zool. 134.

226. LITTLE.

THE weight of this species is from six to seven ounces. The length to the rump ten inches:

DESCRIP.

to the end of the toes thirteen: the breadth sixteen. The head is thick set with feathers, those on the cheeks, in old birds, are of a bright bay: the top of the head, and whole upper side of the body, the neck and breast, are of a deep brown, tinged with red: the greater quill-feathers dusky: the interior webs of the lesser white: the belly is ash colored, mixed with a silvery white, and some red: the legs of a dirty green.

NEST.

The wings of this species, as of all the other, are small, and the legs placed far behind: so that they walk with great difficulty, and very seldom fly. They trust their safety to diving; which they do with great swiftness, and continue long under water. Their food is fish, and water plants. This bird is found in rivers, and other fresh waters. It forms its nest near their banks, in the water; but without any fastening, so that it rises and falls as that does. To make its nest it collects an amazing quantity of grass, water-plants, &c. It lays five or six white eggs; and always covers them when it quits the nest. It should seem wonderful how they are hatched, as the water rises through the nest, and keeps them wet; but the natural warmth of the bird bringing on a fermentation in the vegetables, which are full a foot thick, makes a hot bed fit for the purpose.

GR. with a black chin. Fore part of the neck ferruginous: hind part mixed with dusky. Belly cinereous and silver intermixed. Rather larger than the last.

227. BLACK
CHIN.

Inhabits *Tiree*, one of the *Hebrides*.

SECTION III. WEB-FOOTED BIRDS.

XXXIX.
AVOSET.

BILL long, slender, very thin, depressed, bending upwards.

NOSTRILS narrow, pervious. TONGUE short.

LEGS very long. FEET palmated. Back toe very small.

228. SCOOP-
ING.Recurvirostra. *Gesner av.* 231.Avofetta, Beccoltorto, Bec-
coroella, Spinzago d'acqua.*Aldr. av.* III. 114.*Wil. orn.* 321.*Raii syn. av.* 117.The Scooper. *Charlton ex.* 102.The crooked Bill. *Dale's hist.*
Harwich, 402.*Plott's hist. Staff.* 231.Avofetta, L'Avocette. *Briffon*
av. VI. 538. *Tab.* 47.*fig.* 2.Krumbschnabl. *Kram.* 348.Recurvirostra Avofetta. *Lin.**syft.* 256. *Scopoli,* No. 129.Skarflacka, *Alft. Faun. Suec.**sp.* 191.*Danis* Klyde, Loufugl, Fork-eert Regnsbove. *Br.* 188.*Br. Zool.* 134.

AN *Avofet* that we shot weighed thirteen ounces. Its length to the end of the tail was eighteen inches, to that of the toes twenty-two: the breadth thirty. This bird may at once be distinguished from all others, by the singular form of its bill; which is three inches and a half long, slender, compressed very thin, flexible, and of a substance like whalebone; and contrary to the bills
of

AVOSET



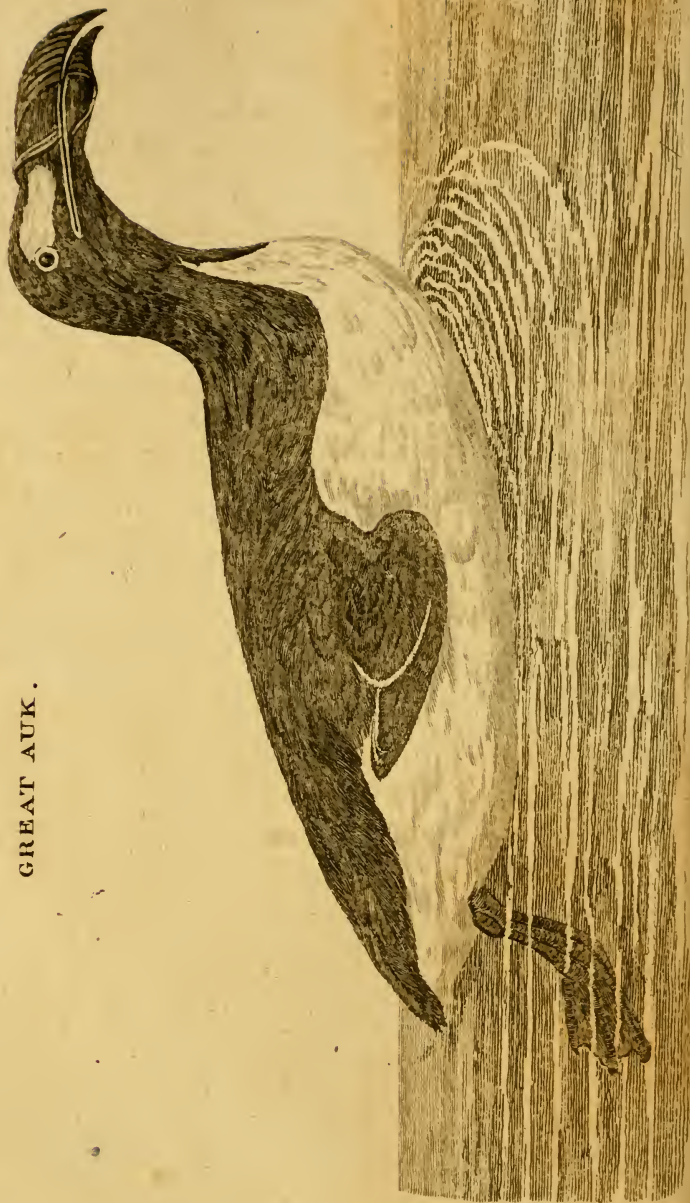
of other birds, is turned up for near half its length. The nostrils are narrow and pervious: the tongue short: the head very round: that, and half the hind part of the neck black; but above and beneath each eye is a small white spot: the cheeks, and whole under side of the body from chin to tail is of a pure white: the back, exterior scapular feathers, the coverts on the ridge of the wings, and some of the lesser quill-feathers, are of the same color; the other coverts, and the exterior sides and ends of the greater quill-feathers, are black: the tail consists of twelve white feathers: the legs are very long, of a fine pale blue color, and naked far above the knees: the webs dusky, and deeply indented: the back toe extremely small.

These birds are frequent in the winter on the shores of this kingdom: in *Gloucestershire*, at the *Severn's Mouth*; and sometimes on the lakes of *Shropshire*. We have seen them in considerable numbers in the breeding season near *Fossdike Wash* in *Lincolnshire*. Like the lapwing when disturbed they flew over our heads, carrying their necks and long legs quite extended, and made a shrill noise (*Twit*) twice repeated, during the whole time. The country people, for this reason, call them *Yelpers*; and sometimes distinguish them by the name of *Picarini*. They feed on worms and insects that they scoop with their bills out of the sand; their search after food is frequently to be discerned

on our shores by alternate semicircular marks in the sand, which shew their progress. They lay two eggs about the size of those of a pigeon, white tinged with green, and marked with large black spots.



GREAT AUK.



BILL strong, thick, compressed.

XL. AUK.

NOSTRILS linear; placed near the edge of the mandible.

TONGUE almost as long as the bill.

TOES, no back toe.

Goirfugel. *Clusii exot.* 367.

Penguin. *Wormii*, 300.

Wil. orn. 323.

Raii syn. av. 119.

Edw. av. 147.

Martin's voy. St. Kilda. 27.

Avis, Gare dicta. Sib. Scot.

III. 22.

Alca major, le grand Pingoin.

Briffon av. VI. 85. Tab. 7.

*Eforokitsok *. Crantz's Greenl.* 229. GREAT.

I. 82.

Alca impennis. Lin. syst. 210.

Faun. Suec. sp. 140.

Islandis Gyr-v Geyrfugel. Nor-

vegis Fiært, Anglemaage,

Penguin, Brillefugel. Brun-

nich, 105.

Br. Zool. 136.

ACCORDING to Mr. *Martin*, this bird breeds on the isle of *St. Kilda*; appearing there the beginning of *May*, and retiring the middle of *June*. It lays one egg, which is six inches long, of a white color; some are irregularly marked with purplish lines crossing each other, others blotched with black and ferruginous about the thicker end: if the egg is taken away, it will not lay another

* Or little wing.

that

that season. A late writer* informs us, that it does not visit that island annually, but sometimes keeps away for several years together; and adds, that it lays its egg close to the sea-mark; being incapable, by reason of the shortness of its wings, to mount higher.

The length of this bird, to the end of its toes, is three feet; the bill, to the corner of the mouth, four inches and a quarter: part of the upper mandible is covered with short, black, velvet like feathers; it is very strong, compressed and marked with several furrows that tally both above and below: between the eyes and the bill on each side is a large white spot: the rest of the head, the neck, back, tail and wings, are of a glossy black: the tips of the lesser quill-feathers white: the whole under side of the body white: the legs black. The wings of this bird are so small, as to be useless for flight: the length, from the tip of the longest quill-feathers to the first joint, being only four inches and a quarter.

This bird is observed by seamen never to wander beyond *soundings*; and according to its appearance they direct their measures, being then assured that land is not very remote. Thus the modern sailors pay respect to *auguries*, in the same manner

* Macaulay's *hist. St. Kilda.* p. 156.



LITTLE AUK.



RAZOR BILL.



as *Aristophanes* tells us those of *Greece* did above two thousand years ago.

Προερεῖ τις ἀεὶ τῶν ορνέων μαντευομένῳ περὶ τῆ πλῆ,
 Νυνὶ μὴ πλεῖ, χειμῶν ἔσται, νυνὶ πλεῖ, κερδὸς ἐπείσται.

Aves. 597.

From birds, in failing men instructions take,
 Now lye in port ; now fail and profit make.

- | | | |
|---------------------------------------|---|-------------|
| Razor-bill, Auk, Murre. | Alca torda. <i>Lin. syst.</i> 210. | 230. RAZOR- |
| <i>Wil. orn.</i> 325. | Tord, Tordmule. <i>Faun. Suec.</i> | BILL. |
| <i>Raii syn. av.</i> 119. | <i>sp.</i> 139. | |
| The Falk. <i>Martin's voy. St.</i> | <i>Norvegis</i> Klub-Alke, Klympe. | |
| <i>Kilda.</i> 33. | <i>Islandis</i> Aulka, Klumbr, | |
| The Marrot. <i>Sib. hist. Fife,</i> | <i>Klumburnevia. Groenlandis</i> | |
| 48. | <i>Awarfuk. Danis</i> Alke. | |
| <i>Edw. av.</i> 358. <i>fig.</i> 2. | <i>Brunnich,</i> 100. | |
| Alca, le Pingoin. <i>Briffon av.</i> | <i>Br. Zool.</i> 136. <i>Scopoli,</i> No. | |
| VI. 89. <i>Tab.</i> 8. <i>fig.</i> 1. | 94. | |

THESE species weigh twenty-two ounces and a half. The length about eighteen inches : the breadth twenty-seven. The bill is two inches long, arched, very strong and sharp at the edges ; the color black : the upper mandible is marked with four transverse grooves ; the lower with three ; the widest of which is white, and crosses each mandible. The inside of the mouth is of a fine pale yellow : from the eye to the bill is a line of white : the head, throat, and whole upper side of the body are black ; the wings of the same color, except

DESCRIP.

cept the tips of the lesser quill-feathers, which are white: the tail consists of twelve black feathers, and is sharp pointed: the whole under side of the body is white: the legs black.

PLACE.

These birds, in company with the *Guillemot*, appear in our seas the beginning of *February*; but do not settle on their breeding places till they begin to lay, about the beginning of *May*. They inhabit the ledges of the highest rocks that impend over the sea, where they form a grotesque appearance; sitting close together, and in rows one above the other. They properly lay but one egg a piece, of an extraordinary size for the bulk of the bird, being three inches long: it is either white, or of a pale sea green, irregularly spotted with black: if this egg is destroyed, both the auk and guillemot will lay another; if that is taken, then a third: they make no nest, depositing their egg on the bare rock: and though such multitudes lay contiguous, by a wonderful instinct each distinguishes its own. What is also matter of great amazement, they fix their egg on the smooth rock, with so exact a balance, as to secure it from rolling off; yet should it be removed, and then attempted to be replaced by the human hand, it is extremely difficult, if not impossible to find its former equilibrium.

The eggs are food to the inhabitants of the coasts they frequent; which they get with great hazard; being lowered from above by ropes, trusting to
the

the strength of their companions, whose footing is often so unstable that they are forced down the precipice, and perish together.

Alca minor, le petit pingoin. <i>Briffon av.</i> VI. 92. <i>Tab.</i> 8. <i>fig.</i> 2.	Alca unifulcata. <i>Brunnich</i> , 102. <i>Br. Zool.</i> 137.	231. BLACK BILLED.
Alca Pica. <i>Lin. syst.</i> 210.		

THIS weighs only eighteen ounces: the length fifteen inches and a half: the breadth twenty-five inches. The bill is of the same form with the Auk's, but is entirely black. The cheeks, chin, and throat are white; in all other respects it agrees with the former species: we can only observe, that this was shot in the winter, when the common sort have quitted the coasts. DESCRIP.

When this bird was killed, it was observed to have about the neck abundance of lice, resembling those that infest the human kind, only they were spotted with yellow.

The *Alca Baltica* of *Brunnich*, No. 115, a variety in all respects like the common kind, only the under side of the neck white, is sometimes found on our coasts.

232. PUFFIN. *Puphinus anglicus*. *Gesner* *Caii opusc.* 97.
av. 725. *Anas arctica.* *Clusii Exot.*
Pica marina. *Aldr. av.* III. 104.
92. *Alca arctica.* *Lin. syst.* 211.
Puffin, Coulterneb, &c. *Wil.* *Faun. Suec. sp.* 141.
orn. 325. *Islandis & Norveg.* Lunde,
Raii syn. av. 120. *hujus pulli* Lund Toller.
Edw. av. 358. *fig.* 1. *Danis* Islandsk Papegoye.
The Bowger. *Martin's voy.* *Brunnich,* 103.
St. Kilda. 34. See-Papagey, or See-Taucher.
Fratercula, le Macareux. *Brif-* *Frisch,* II. 192.
son av. VI. 81. *Tab.* 6. *Br. Zool.* 135.
fig. 1.

DESCRIP.

THIS bird weighs about twelve ounces: its length is twelve inches: the breadth from tip to tip of the wings extended, twenty-one inches: the bill is short, broad at the base, compressed on the sides, and running up to a ridge, triangular and ending in a sharp point: the base of the upper mandible is strengthened with a white narrow prominent rim full of very minute holes: the bill is of two colors, the part next the head of a bluish grey, the lower part red: in the former is one transverse groove or furrow, in the latter three: the size of the bills of these birds vary: those of *Priestholm Isle* are one inch and three quarters long; and the base of the upper mandible one inch broad: but in the birds from the *Isle of Man* these proportions are much less.

BILL.

NOSTRILS.

The nostrils are very long and narrow; com-
mence

mence at the above-mentioned rim, terminate at the first groove, and run parallel with the lower edge of the bill.

The *irides* are grey, and the edges of the eye-lids of a fine crimson: on the upper eye-lid is a singular callous substance, grey, and of a triangular form: on the lower is another of an oblong form: the crown of the head, whole upper part of the body, tail, and covert feathers of the wings are black; but in some the feathers of the back are tinged with brown: the quill-feathers are of a dusky hue.

EYES.

HEAD.

The cheeks are white, and so full of feathers as to make the head appear very large and almost round: the chin of the same color; bounded on each side by a broad bed of grey: from the corner of each eye is a small separation of the feathers terminating at the back of the head. The neck is encircled with a broad collar of black: but the whole lower part of the body as far as is under water is white, which is a circumstance in common with most of this genus.

Tail black, composed of sixteen feathers: legs small, of an orange color, and placed so far behind as to disqualify it from standing, except quite erect: resting not only on the foot, but the whole length of the leg: this circumstance attends every one of the genus, but not remarked by any naturalist, except *Wormius*, who has figured the *Penguin*, a bird of this genus, with great propriety: this makes the
rise

rise of the Puffin from the ground very difficult, and it meets with many falls before it gets on wing; but when that is effected, few birds fly longer or stronger.

PLACE.

These birds frequent the coasts of several parts of *Great Britain* and *Ireland*; but no place in greater numbers than *Priestholm Isle**, where their flocks may be compared to swarms of bees for multitude. These are birds of passage; resort there annually about the fifth or tenth of *April*, quit the place (almost to a bird) and return twice or thrice before they settle to burrow and prepare for ovation and incubation. They begin to burrow the first week in *May*; but some few save themselves that trouble, and dislodge the rabbits from their holes, and take possession of them till their return from the isle. Those which form their own burrows, are at that time so intent on the work as to suffer themselves to be taken by the hand. This task falls chiefly to the share of the males, for on dissection ten out of twelve proved of that sex. The males also assist in incubation; for on dissection several males were found sitting.

The first young are hatched the beginning of *July*, the old ones shew vast affection towards them; and seem totally insensible of danger on the breeding season. If a parent is taken at that time, and suspended by the wings, it will in a sort of despair

* Off the coast of *Anglesea*.

treat itself most cruelly by biting every part it can reach; and the moment it is loosed, will never offer to escape, but instantly resort to its unfledged young: but this affection ceases at the stated time of migration, which is most punctually about the eleventh of *August*, when they leave such young as cannot fly, to the mercy of the *Peregrine Falcon*, who watches the mouths of the house for the appearance of the little deserted puffins which forced by hunger are compelled to leave their burrows. The Rev^d. Mr. *Hugh Davies*, of *Beaumaris*, to whom I am indebted for much of this account, informed me that on the twenty-third of *August*, so entire was the migration, that neither Puffin, Razor-Bill, Guillemot, or Tern was to be seen there.

I must add, that they lay only one egg, which differ much in form; some have one end very acute; others have both extremely obtuse; all are white.

Their flesh is excessive rank, as they feed on sea weeds and fish, especially *Sprats*: but when pickled and preserved with spices, are admired by those who love high eating. Dr. *Caius* tells us, that in his days the church allowed them in lent, instead of fish: he also acquaints us, that they were taken by means of ferrets, as we do rabbits: at present they are either dug out, or drawn from their burrows by a hooked stick: they bite extremely hard, and keep such fast hold on whatsoever they fasten, as not to be easily disengaged. Their noise, when

taken, is very disagreeable; being like the efforts of a dumb person to speak.

NOTE OF SEA
FOWL.

The notes of all the sea birds are extremely harsh or inharmonious: we have often rested under the rocks attentive to the various sounds above our heads, which, mixed with the solemn roar of the waves swelling into and retiring from the vast caverns beneath, have produced a fine effect. The sharp voice of the sea gulls, the frequent chatter of the guillemots, the loud note of the auks, the scream of the herons, together with the hoarse, deep, periodical croak of the corvorants, which serves as a base to the rest; has often furnished us with a concert, which, joined with the wild scenery that surrounded us, afforded, in a high degree, that species of pleasure which arises from the novelty, and we may say gloomy grandeur of the entertainment.

The winter residence of this genus, and that of the guillemot, is but imperfectly known: it is probable they live at sea, in some more temperate climate, remote from land; forming those multitudes of birds that navigators observe in many parts of the ocean: they are always found there at certain seasons, retiring only at breeding time: repairing to the northern latitudes; and during that period are found as near the *Pole* as navigators have penetrated.

During winter *Razor-bills* and *Puffins* frequent the coast of *Andalusia*, but do not breed there.

Rotger

Rotges *Martin's* Spitzberg. 85.
Little black and white Diver.

Wil. orn. 343.

Mergulus Melanoleucos rostro acuto brevi. *Raii syn.*
av. 125.

Edw. av. 91.

Uria minor, le petit Guillemot. *Briffon av.* VI. 73.

Alca alle. *Lin. syst.* 211.

Faun. Succ. sp. 142.

Islandis Halkioen, Havdirdell.

Norvegis Soe Konge, Soeren Jakob, Perdrikker, Persuper, Boefiær, Borrefiær, Hys Thomas. *Feroensibus* Fulkop. *Groenlandis* Akpaliarfok. *Brunnich*, 106.

Gunner tab. 6.

Br. Zool. 137.

233. LITTLE.

THE bird our description was made from was taken in *Lancashire*; its bulk was not superior to that of a blackbird. The bill convex, short, thick, and strong; its color black. That of the crown of the head, the hind part of the neck, the back, and the tail black; the wings the same color; but the tips of the lesser quill-feathers white: the inner coverts of the wings grey: the cheeks, throat, and whole under side of the body white: the scapular feathers black and white: the legs and feet covered with dirty greenish white scales; the webs black.

DESCRIP.

Mr. *Edwards* has figured a bird that varies very little from this: and has added another, which he imagines differs only in sex: in that, the head and neck are wholly black; and the inner coverts of the

M m 2

wings

wings barred with a dirty white. We met with the last in the cabinet of Doctor *David Skene* at *Aberdeen*; it was shot on the coast north of *Slains* in the spring of the year.

BILL slender, strong, pointed. The upper mandible slightly bending towards the end. Base covered with soft short feathers.

XII.
GUILLE-
MOT.

NOSTRILS lodged in a hollow near the base:

TONGUE slender, almost the length of the bill.

TOES, no back toe.

- | | |
|--|--|
| Guillem, Guillemot, Skout,
Kiddaw, Sea-hen. <i>Wil. orn.</i>
324. | Colymbus Troile. <i>Lin. syst.</i> 234. |
| <i>Raii syn. av.</i> 120. | <i>Faun. Suec. sp.</i> 149. |
| The Lavy. <i>Martin's voy. St.</i>
<i>Kilda</i> , 32. | <i>Islandis & Norvegis</i> Lomvie,
Langivie, Lomrifvie, Stor-
fugl. <i>Brunnich</i> , 108. |
| <i>Edw. av.</i> 359. <i>fig.</i> 1. | Sea-Taube, or Groenlandif-
cher Taucher. <i>Frisch</i> , II. |
| Uria, le Guillemot. <i>Briffon</i>
<i>av.</i> VI. 70. <i>Tab.</i> 6. <i>fig.</i> 1. | 185. |
| Lommia. <i>N. Com. Petr.</i> IV. | <i>Br. Zool.</i> 138. |
| 414. | |

THIS species weighs twenty-four ounces : the length seventeen inches : the breadth twenty-seven and a half : the bill is three inches long ; black, strait, and sharp pointed : near the end of the lower mandible is a small process ; the inside of the mouth yellow : the feathers on the upper part of the bill are short, and soft like velvet : from the eye to the hind part of the head is a small division of the feathers. The head, neck, back, wings, and tail are of a deep mouse color ;

DESCRIP.

the tips of the lesser quill-feathers white: the whole under part of the body is of a pure white: the sides under the wings marked with dusky lines. Immediately above the thighs are some long feathers that curl over them. The legs dusky.

These birds are found in amazing numbers on the high cliffs on several of our coasts, and appear at the same time as the auk. They are very simple birds; for notwithstanding they are shot at, and see their companions killed by them, they will not quit the rock. Like the auk, they lay only one egg, which is very large; some are of a fine pale blue, others white, spotted, or most elegantly streaked with lines crossing each other in all directions. The Rev. Mr. *Low* of *Birsa* assures me, that they continue about the *Orknies* the whole winter,

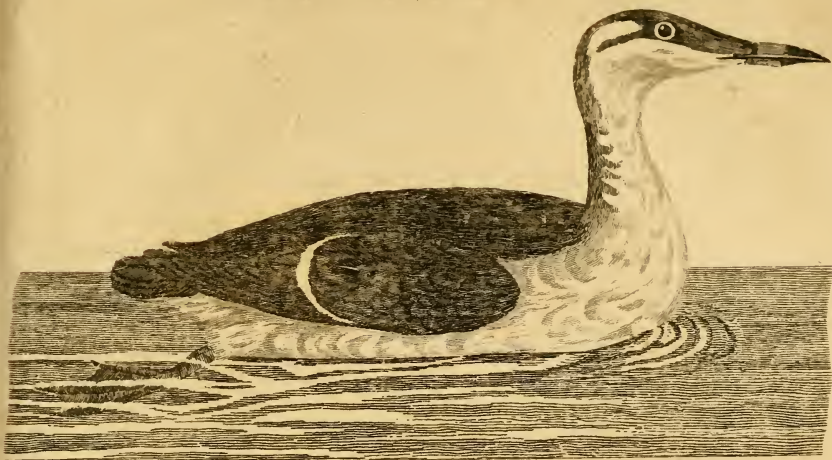
Egg.

235. LESSER. *Uria Svarbag.* Ringuia. *Brunnich*, No. 110.
Islandis Stutnefur, Svartbakur. *Scopoli*, No. 103.
Br. Zool. 138.

DESCRIP.

THE weight is nineteen ounces: the length sixteen inches: the breadth twenty-six. The bill two inches and a half long, shaped like the Guillemot's, but weaker. The top of the head, the whole upper part of the body, wings and tail are of a darker color than the former: the cheeks, throat,

LESSER GUILLEMOT.



SPOTTED GUILLEMOT.

Nº 256.





throat, and all the lower side of the body are white: from the corner of the eye is a dusky stroke, pointing to the hind part of the head: the tips of the secondary feathers white: the legs are black: the tail very short, and consists of twelve feathers.

These birds frequent the *Welch* coasts in the winter time; but that very rarely: where they breed is unknown to us; having never observed them on the rocks among the congenerous birds. These and the black-billed *Auks* haunt the *Firth of Forth* during winter in flocks innumerable, in pursuit of sprats. They are called there *Morrots*: they all retire before spring.

Greenland-dove, or Sea-turtle. *Wil. orn.* 326.

Raii syn. av. 121.

Ray's itin. 183, 192.

Feiste. Gunner. tab. 4.

Turtur maritimus insulæ

Bafs. Sib. hist. Fife, 46.

The Scraber. *Martin's voy.*

St. Kilda. 32.

Cajour, Pynan. *N. Com. Petr.*

IV. 418.

Uria minor nigra, le petit

Guillemot noir. *Briffon av.* 236. BLACK. VI. 76.

Colymbus Grylle. Lin. syst. 220.

Faun. Suec. sp. 148.

Islandis Teista. Norvegis Tei-

ste. Groenlandis Sarpak.

Brunnich, 113.

Groenlandische Taube.

Frisch, II. 185.

Br. Zool. 138.

THE length of this species is fourteen inches: the breadth twenty-two: the bill is an inch and a half long; strait, slender, and black: the inside of the mouth red: on each wing is a large

BLACK GUILLEMOT. CLASS II.

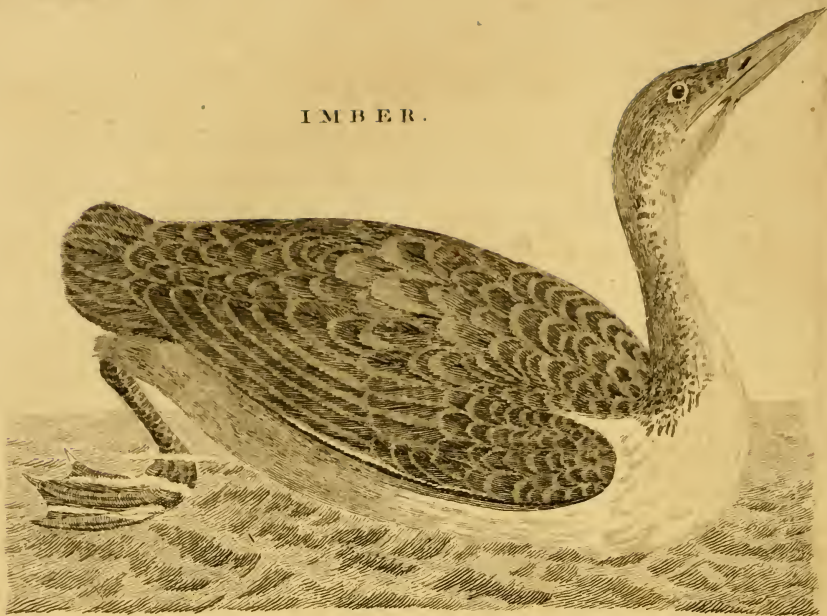
large bed of white, which in young birds is spotted: the tips of the lesser quill-feathers, and the inner coverts of the wings, are white: except these, the whole plumage is black. In winter it is said to change to white: and a variety spotted with black and white* is not uncommon in *Scotland*. The tail consists of twelve feathers: the legs are red.

These birds are found on the *Bass isle* in *Scotland*; in the *isle of St. Kilda*; and, as Mr. Ray imagines, in the *Farn islands* off the coast of *Northumberland*; we have also seen it on the rocks of *Llandidno* in *Caernarvonshire*. Except at breeding time, it keeps always at sea; and is very difficult to be shot, diving at the flash of the pan. The *Welsh* call this bird *Casgan Longwr*, or the sailor's hatred, from a notion that its appearance forebodes a storm. It visits *St. Kilda's* in *March*: makes its nest far under ground; and lays a grey egg; or, as *Steller* says, whitish spotted with rust, and speckled with ash color.

* The spotted *Greenland Dove* of Mr. *Edwards*, plate 503.



IMBER.



NORTHERN DIVER.



BILL strong, strait, pointed. Upper mandible longest; edges of each bending in.

NOSTRILS linear.

TONGUE pointed, long, ferrated near the base.

LEGS thin and flat.

TOES, exterior the longest: back toe joined to the interior by a small membrane.

TAIL short, consisting of twenty feathers.

XLII.
DIVER.

Clusius's. *Wil. orn.* 342.

Raii syn. av. 125.

Mergus maximus Farrensis,
five Arcticus. *Clusii exot.*
102.

Colymbus maximus stellatus
nostras. *Sib. hist. Scot.* 20.
Tab. 15.

Le grand Plongeon tacheté.

Briffon av. VI. 120. *Tab.* 237. NORTH-
ERN.

11. *fig.* 1.

Colymbus glacialis. *Lin. syst.*
221.

Norwegis Brusen. *Groenlan-*
dis Tiulik. *Brunnich, orn.*
134.

Grosse Halb-Ente, Meer-
Nøring. *Frisch*, II. 185. *A.*
Br. Zool. 139.

THE length of this species is three feet five inches: its breadth four feet eight: the bill to the corners of the mouth four inches long; black and strongly made. The head and neck are of a deep black: the hind part of the latter is marked with a large semilunar white band: immediately under the throat is another; both marked with black oblong strokes pointing down: the lower part of the neck is of a deep black, glossed with

DESCRIP.

with a rich purple: the whole under side of the body is white: the sides of the breast marked with black lines: the back, coverts of the wings, and scapulars, are black, marked with white spots: those on the scapulars are very large, and of a square shape; two at the end of each feather.

The tail is very short, and almost concealed by the coverts, which are dusky spotted with white: the legs are black. These birds inhabit the northern parts of this island, live chiefly at sea, and feed on fish: we do not know whether they breed with us, as they do in *Norway*; which has many birds in common with *Scotland*. In the last it is called *Mur-buachaill*, or the *Herdsmen* of the sea, from its being so much in that element,

38. IMBER. *Colymbus immer. Lin. syst.* Ember Goose. *Sibbald Scot.*
 222. 21. *Wallace Orkney*, 16.
Gesner's greater Doucker. Wil. *Debes Feroe Isles*, 138. *Pon-*
orn. 342. *Raii syn. av.* *toppidan*, II. 89.
 126. No. 8. *Fluder. Ges-* *Le grand Plongeon. Brisson*,
ner av. 140. VI. 105. *Tab. X.*
Immer. Brunnich, No. 129.

THIS species inhabits the seas about the *Ork-*
nies; but in severe winters visits the southern
 parts of *Great Britain*. It lives as much at sea as the
 former; so that credulity believed that it never
 quitted the water, and that it hatched its young in
 a hole

a hole formed by nature under the wing for that end.

It is superior in size to a goose. The head dusky: the back, coverts of the wings, and tail clouded with lighter and darker shades of the same. Primaries and tail black: under side of the neck spotted with dusky: the breast and belly silvery: legs black.

The skins of the birds of this genus are uncommonly tough; and in the northern countries have been used as leather.

Greatest speckled Diver, or	Le petit Plongeon.	<i>Briffon</i>	239. SPECK- LED.
Loon. <i>Wil. orn.</i> 341.		<i>av.</i> VI. 108. <i>Tab.</i> 10. <i>fig.</i> 2.	
<i>Raii syn. av.</i> 125.		<i>Mergus Stellatus, Danis Soc-</i>	
<i>Colymbus caudatus stellatus.</i>		<i>Hane. Brunnich, 130.</i>	
<i>N. Com. Petr.</i> IV. 424.		<i>Br. Zool.</i> 139.	

THIS species weighs two pounds and a half: its length twenty-seven inches: its breadth three feet nine. The bill three inches long, and turns a little upwards; the mandibles, when closed at the points, do not touch at the sides. The head is of a dusky grey, marked with numerous white spots: the hind part of the neck an uniform grey: the whole upper part of the body, and greater coverts of the wings dusky, speckled with white: the lesser coverts dusky, and plain. The tail consists of about twenty black feathers; in some tipped with white.

DESCRIP.

RED THROATED DIVER. CLASS II.

white. The cheeks and whole under side of the body of a fine glossy white: and the feathers, as in all this genus, which resides almost perpetually on the water, are excessively thick, and close set: the legs are dusky.

These birds frequent our seas, lakes and rivers in the winter. On the *Thames* they are called *sprat loons*, for they attend that fish during its continuance in the river. They are subject to vary in the disposition and form of their spots and colors: some having their necks surrounded with a speckled ring: in some the spots are round, in others oblong.

- | | | |
|-----------------------|--|--|
| 240. RED
THROATED. | <i>Edw. av.</i> 97.
<i>Gunner. Tab.</i> 2. f. 2.
<i>Colymbus septentrionalis.</i>
<i>Lin. syst.</i> 220.
<i>Le Plongeon a gorge rouge.</i> | <i>Briffon av.</i> VI. III. <i>Tab.</i> II.
<i>fig.</i> 1.
<i>Islandis & Norwegis</i> Loom v.
<i>Lumme, Danis</i> Lomm.
<i>Brunnich,</i> 132.
<i>Br. Zool.</i> 140. |
|-----------------------|--|--|

THIS species breeds in the northern parts of Scotland, on the borders of the lakes: but migrates southward during winter. It lays two eggs. The sexes do not differ in colors; and are a distinct kind from the black throated, the *Lumme* of the *Norwegians*. Its shape is more elegant than that of the others. The weight is three pounds: the length, to the tail end, two feet; to that of the toes, two feet four inches: the breadth three feet

DESCRIP.

RED THROATED DIVER.



BLACK THROATED DIVER.

Nº 241.





feet five inches. The head small and taper: the bill strait, and less strong: the size about a fourth less than the preceding. The head and chin are of a fine uniform grey: the hind part of the neck marked with dusky and white lines, pointing downwards: the throat is of a dull red: the whole upper part of the body, tail and wings of a deep grey almost dusky; but the coverts of the wings, and the back, are marked with a few white spots: the under side of the body white: the legs dusky.

Lumme. <i>Worm. Mus. Brun-</i>	<i>Colymbus arcticus. Lin. syst.</i>	241. BLACK
<i>nich, No. 133.</i>	221. <i>Faun. Succ. No.</i>	THROATED.
Northern Doucker. <i>Wil. orn.</i>	Speckled Diver. <i>Edw. 146.</i>	
343. <i>Raii syn. av. 125.</i>		

A SPECIES somewhat larger than the last. Bill black: front black: hind part of the head and neck cinereous: sides of the neck marked with black and white lines pointing downwards: fore part of a glossy variable black, purple and green.

Back, scapulars, and coverts of wings black, marked (the two first with square) the last with round spots of white: quill feathers dusky: breast and belly white. Tail short and black: legs partly dusky, partly reddish.

BILL

XLIII.
GULL.

BILL strong, strait, bending near the end; an angular prominence on the lower mandible.

NOSTRILS linear.

TONGUE a little cloven.

BODY light, wings large.

LEG and back toe small, naked above knee.

242. BLACK
BACKED.

Wil. orn. 344.

Raii syn. av. 127.

Le Goiland noir. *Briffon av.*

VI. 158.

Larus marinus. Lin. syst. 225.

Faun. Suec. sp. 155.

Danis Blaae maage, *Norvegis*

Svartbag, Havmaase. *Brun-*

nich, 145.

Br. Zool. 140.

DESCRIP.

THE weight of this species is near five pounds: the length twenty-nine inches: the breadth five feet nine. The bill is very strong and thick, and almost four inches long; the color a pale yellow; but the lower mandible is marked with a red spot, with a black one in the middle. The irides yellow: the edges of the eye-lids orange color: the head, neck, whole under side, tail and lower part of the back, are white: the upper part of the back, and wings, are black: the quill-feathers tipped with white: the legs of a pale flesh color.

This kind inhabits our coasts in small numbers; and breeds in the highest cliffs. It feeds not only on fish: but like the Raven, very greedily devours
carrion:

carrión. Its egg is very blunt at each end; of a dusky olive color, quite black at the greater end; and the rest of it thinly marked with dusky spots.

I have seen on the coast of *Anglesea*, a bird that agrees in all respects with this except in size, in wanting the black spot on the bill, and in the color of the legs, which in this are of a bright yellow: the extent of wings is only four feet five: the length only twenty-two inches: the weight one pound and a half. This species, or perhaps variety (for I dare not assert which) rambles far from the sea, and has been shot at *Bulstrode*, in *Middlesex*.

Our <i>Cataraeta</i> , I suppose the Cornish Gannet. <i>Wil. orn.</i> 348.	Skua Hoirei. <i>Clusii Exot.</i> 368, 243. SKUA. 369.
<i>Raii syn. av.</i> 128.	<i>Larus Cataraetes. Lin. syst.</i> 226.
<i>Cataraetes. Sibb. Scot. tab.</i> 14.	<i>Skua. Brunnich, ornith.</i> 33.
Sea Eagle. <i>Sibb. hist. Fife.</i> 46.	<i>Fercensibus Skue. Islandis</i> <i>Skumr. Norvegis Kav-Oern.</i> <i>Brunnich, 125.</i>
Le Stercoraire rayé. <i>Briffon</i> <i>av. VI.</i> 152.	Brown and ferruginous Gull. <i>Br. Zool.</i> 140.
<i>Pontopp. Norw. II.</i> 96.	

THE length of this singular Gull is two feet: the extent four feet and a half: the weight three pounds: the bill two inches one fourth long, very much hooked at the end, and very sharp: the upper mandible covered more than half way with

DESCRIP.

with a black cere or skin as in the hawk kind: the nostrils placed near the bend, and are pervious.

The feathers on the head, neck, back, scapulars and coverts of the wings are of a deep brown, marked with rust color, (brightest in the male). The shafts of the primaries are white: the end and exterior side of the first is deep brown; the ends only of the rest brown: the lower parts on both sides being white; the secondaries marked in like manner; forming a great bar of white. The breast, belly and vent ferruginous, tinged with ash color. The tail when spread is circular, of a deep brown, white at the root; and with shafts of the same color.

The legs are covered with great black scales: the talons black, strong and crooked; the interior remarkably so.

HISTORY.

This bird inhabits *Norway*, the *Ferroe* isles, *Shetland*, and the noted rock *Foula*, a little west of them. It is also a native of the *South sea*. It is the most formidable Gull; its prey being not only fish, but what is wonderful in a web-footed bird, all the lesser sort of water fowl, such as teal, &c. Mr. *Schroter*, a Surgeon in the *Ferroe* isles, relates that it likewise preys on ducks, poultry, and even young lambs*. It has all the fierceness of the eagle in defending its young; when the inhabitants of those islands visit the nest, it attacks them with

* *Hoier in Clus. exot.* 369. *Brunnich*, 35.

great force, so that they hold a knife erect over their heads, on which the *Skua* will transfix itself in its fall on the invaders.

The Rev. Mr. *Low*, minister of *Birfa*, in *Orkney*, from whom an accurate history of those islands, and of *Shetland* may be expected, confirmed to me part of the above. On approaching the quarters of these birds, they attacked him and his company with most violent blows; and intimidated a bold dog of Mr. *Low's* in such a manner, as to drive him for protection to his master. The natives are often very rudely treated by them, while they are attending their sheep on the hills; and are obliged to guard their heads by holding up their sticks, on which the birds often kill themselves. In *Foula* it is a privileged bird, because it defends the flocks from the eagle, which it beats and pursues with great fury; so that even that rapacious bird seldom ventures near its quarters. The natives of *Foula* on this account lay a fine on any person who destroys one: they deny that it ever injures their flocks or poultry, but imagine it preys on the dung of the *Arctic*, and other larger gulls, which it persecutes till they mute for fear.

Mr. *Ray* and Mr. *Smith** suppose this to be the *Cornish Gannet*; but in our account of that bird we shall shew that it is a different species. Mr. *Macaulay*† mentions a gull that makes great ha-

* *Hist. Kerry.*

† *Hist. St. Kilda.* p. 158.

voke among the eggs and sea fowl of *St. Kilda*; it is there called *Tuliac*: his description suits that of the *herring Gull*; but we suspect he confounds these two kinds, and has transferred the manners of this species to the latter.

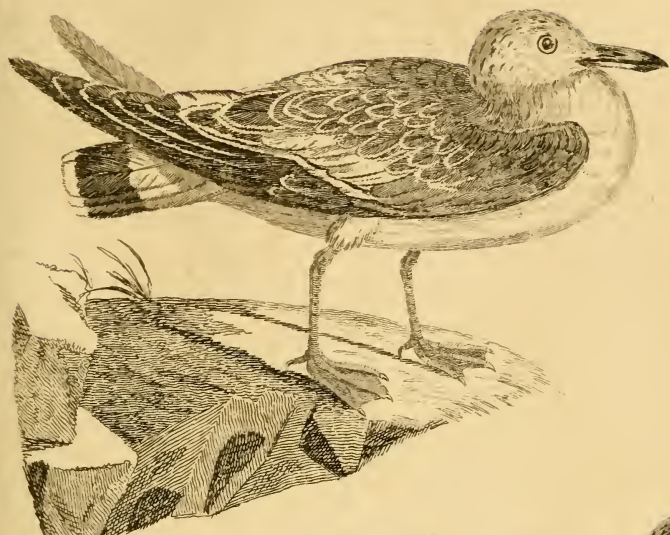
Linnaeus involves two species in the article *Larus Cataraeta*; this, and the *arctic* bird of Mr. *Edwards*, birds of very different characters. M. *Brisson* does not seem perfectly acquainted with this bird; for the synonym of the *Skua*, given by him to his fifth gull (our brown and white gull) belongs to this species; and his print of the *Stercoraire rayé*, p. 152. *tab* 13. *tom.* VI. to which he has given the synonym of Mr. *Edwards's* arctic bird, seems to be the very same which we have here described.

244. BLACK TOED. *Cepphus. Aldr. av. III. 38. The Cepphus. Phil. Transact. Vol. 52. 135.*
Wil. orn. 351. Catharacta Cepphus, Strand- Raï syn. av. 129. hoeg. Brunnich, ornith. 126.

DESCRIP.

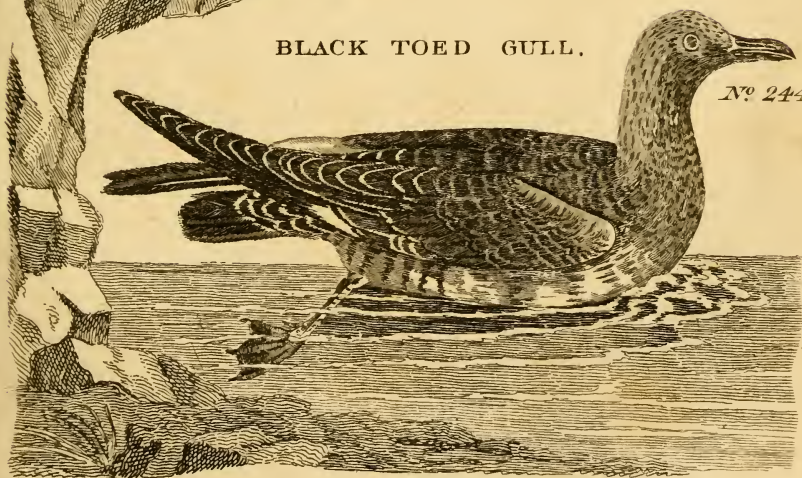
THIS species weighs eleven ounces: its length is fifteen inches: its breadth thirty-nine: the bill is one inch and a half long, the upper part covered with a brown cere: the nostrils like those of the former; the end black and crooked. The feathers of the forehead come pretty low on the bill: the head and neck are of a dirty white: the hind,

WINTER GULL.



BLACK TOED GULL.

Nº 244.





ARCTIC GULLS.



hind part of the latter plain, the rest marked with oblong dusky spots.

The breast and belly are white, crossed with numerous dusky and yellowish lines: the feathers on the sides and the vent, are barred transversely with black and white: the back, scapulars, coverts of the wings and tail, are black, beautifully edged with white or pale rust color: the shafts and tips of the quill-feathers are white: the exterior web, and upper half of the interior web black, but the lower part of the latter white: the tail consists of twelve black feathers tipped with white; the two middle of which, are near an inch longer than the others: the shafts are white; and the exterior webs of the outmost feather is spotted with rust color. The legs are of a bluish lead color: the lower part of the toes and webs black.

A bird of this kind was taken near *Oxford*, and communicated to the Royal Society by Dr. *Lysons* of *Gloucester*.

The Struntjagger, or Dung-hunter. *Marten's Spitzberg* 87.

The Arctic Bird. *Edw. av.* 148. 149.

Larus Parasiticus. *Lin. syst.* 245. ARCTIC 226.

Swartlasse, Labben, Elof.

Faun Suec. sp. 6.

Brunnich, 127.

THESE birds are very common in the *Hebrides*. I saw numbers in *Jura, Ilay* and *Rum*,
N n 2 where

where they breed in the heath; if disturbed they fly about like the lapwing, but soon alight. They are also found in the *Orknies*, where they appear in *May*, and retire in *August*. It is also found on the coast of *Yorkshire*, where it is known by the name of *Feaser*. All writers that mention it agree, that it has the property of pursuing the lesser gulls so long, that they mute for fear, and that it catches up and devours their excrement before they drop into the water; from which the name. *Linneus* wittily calls it the *Parasite*, alluding to its fordid life.

DESCRIP.

The length of this species is twenty-one inches: the bill is dusky, about an inch and a half long, pretty much hooked at the end, but the strait part is covered with a sort of cere. The nostrils are narrow, and placed near the end, like the former. In the *male*, the crown of the head is black: the back, wings, and tail dusky; but the lower part of the inner webs of the quill-feathers white: the hind part of the neck, and whole underside of the body white: the tail consists of twelve feathers, the two middlemost near four inches longer than the others: the legs black, small, and scaly.

MALE.

FEMALE.

The *female* is entirely brown; but of a much paler color below than above: the feathers in the middle of the tail only two inches longer than the others. The specimen from which Mr. *Edwards* took the figure of his female *Arctic* bird, had lost those



HERRING GULL.



Nº 211.

WAGEL.



Nº 217.

those long feathers, so he has omitted them in the print.

Linnaeus has separated this from its mate, his *Larus parasiticus*, and made it a synonym to his *L. Cataraetes*, a bird as different from this as any other of the whole genus.

Burgermeister *Martin's Spitzberg*. 84.

Herring Gull. *Wil. orn.* 345.

Larus cinereus maximus. Raii syn. av. 127.

Le Goiland gris. *Briffon av.* VI. 162.

Larus fuscus. Lin. syst. 125.

Faun. Suec. sp. 154.

Danis Silde-Maage. Islandis

Veydebjalla. Brunnich, 142.

Grosse Staff Moeur. Frisch,

II. 218.

Br. Zool. 141.

246. HER-
RING.

THIS gull weighs upwards of thirty ounces: the length twenty-three inches; its breadth fifty-two. The bill yellow, and the lower mandible marked with an orange colored spot: the irides *straw color*: the edges of the eye-lids red: the head, neck, and tail white: the back, and coverts of the wings ash colored: the upper part of the five first quill-feathers are black, marked with a white spot near their end: the legs of a pale flesh color. These birds breed on the ledges of rocks that hang over the sea: they make a large nest of dead grass, and lay three eggs of a dirty white, spotted with black. The young are ash colored, spotted with brown; they do not come to their proper color the first year: this is common to other gulls; which has greatly

DESCRIP.

multiplied the species among authors, who are inattentive to these particulars. This gull is a great devourer of fish, especially of that from which it takes its name: it is a constant attendant on the nets, and so bold as to seize its prey before the fishermen's faces.

- (A.)
 247. WAGEL. Great grey Gull, the Cornish Wagel. *Wil. orn.* 349. *Larus Nævius. Lin. syst.* 225.
Raii syn. av. 130. *Danis Graae-Maage. Islandis*
Le Goiland varié, ou le Grisard. Brisson av. VI. 167. *Kablabrinkar. Brunnich,*
150.
Brown and White Gull. Br. Zool. II. 422.

DESCRIP.

THESE birds vary much in their size; one we examined weighed three pounds seven ounces: the length was two feet two inches: the breadth five feet six: others again did not weigh two pounds and a half: the irides are dusky: the bill black, and near three inches long. The whole plumage of the head and body, above and below, is a mixture of white, ash color, and brown: the last color occupies the middle of each feather; and in some birds is pale, in others dark: the quill-feathers black: the lower part of the tail is mottled with black and white; towards the end is a brown black bar, and the tips are white: the legs are of a dirty white.

Some have supposed this to be the young of the preceding

preceding species, which (as well as the rest of the gull tribe) scarce ever attains its true colors till after the first year: but it must be observed, that the first colors of the irides, of the quill-feathers, and of the tail, are in all birds permanent; these, as we have remarked, differ in each of these gulls so greatly, as ever to preserve unerring notes of distinction.

This species is likewise called by some the *Dung Hunter*; for the same reason as the last is styled so.

Winter Mew, or Cuddy Mod-
dy. *Wil. orn.* 350.
Raii syn. av. 130.

Gavia Hyberna, le Mouette
d'hiver. *Brisson av.* VI.
189.
Br. Zool. 142.

248. WIN-
TER.

THIS weighs from fourteen to seventeen ounces: the length eighteen inches; the breadth three feet nine. The irides are hazel: the bill two inches long, but the slenderest of any gull: it is black at the tip, whitish towards the base. The crown of the head, and hind part, and sides of the neck, are white, marked with oblong dusky spots; the forehead, throat, middle of the breast, belly, and rump, are white; the back and scapulars are of a pale grey; the last spotted with brown; the coverts of the wings are of a pale brown, edged

DESCRIP.

with white; the first quill-feather is black; the succeeding are tipped with white: the tail is white, crossed near the end with a black bar; the legs of a dirty bluish white.

This kind frequents, during winter, the moist meadows in the inland parts of *England*, remote from the sea. The gelatinous substance, known by the name of *Star Shot*, or *Star Gelly*, owes its origin to this bird, or some of the kind; being nothing but the half digested remains of earth-worms, on which these birds feed, and often discharge from their stomachs*.

Linnaeus, p. 224. makes this species synonymous with the *Larus tridactylus* or *Tarrocks*; but as we have had opportunity of examining several of each species, and find in all those strong distinctions remarked in our descriptions, we must decline assenting to the opinion of that eminent naturalist.

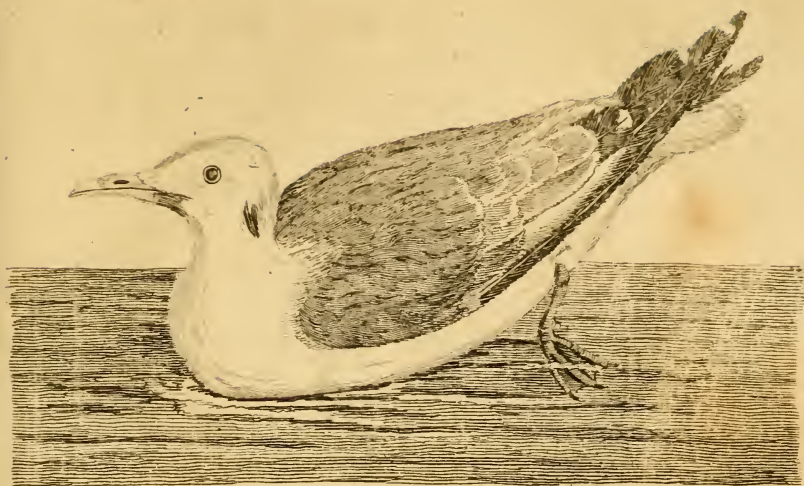
249. Common.
MON.

Galedor, Crocala, Galetta.	La Mouette cendrée. <i>Briffon</i>
<i>Aldr. av.</i> III. 34.	<i>av.</i> VI. 175. tab. 16. fig. 1.
Common Sea Mall. <i>Wil. orn.</i>	Gabbiano minore. <i>Zinzn.</i> 115.
345.	<i>Larus canus. Lin. syst.</i> 224.
Common Sea Mall, or Mew.	<i>Br. Zool.</i> 142. <i>Scopoli</i> , No.
<i>Rati syn. av.</i> 127.	104.

THIS is the most numerous of the genus. It breeds on the ledges of the cliffs that im-

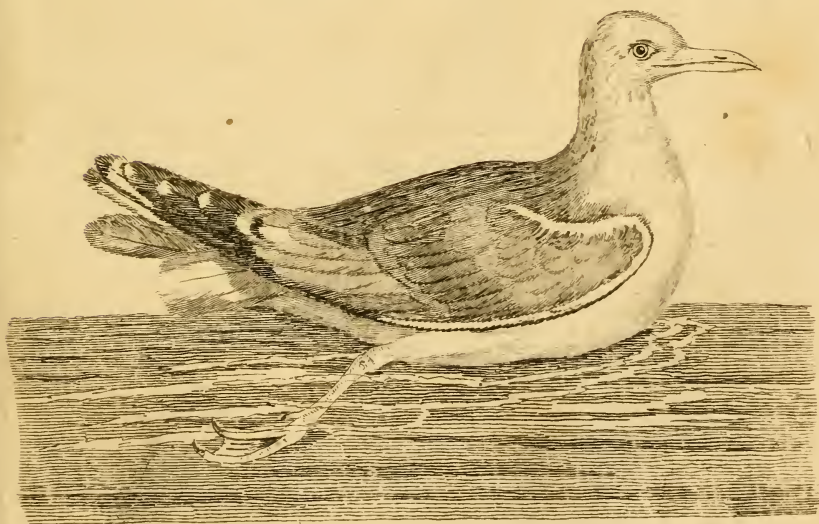
* Vide *Morton's Nat. Hist. Northampton.* p. 353.

KITTIWAKE



COMMON GULL.

Nº 249.





pend over the sea: in winter they are found in vast flocks on all our shores. They differ a little in size; one we examined weighed twelve ounces and a half: its length was seventeen inches: its breadth thirty-six: the bill yellow: the head, neck, tail, and whole under side of the body, a pure white: the back, and coverts of the wings, a pale grey: near the end of the greater quill-feathers was a black spot: the legs a dull white, tinged with green.

DESCRIP.

Larus Rissa. *Lin. syst.* 224.
Rissa *Islandis*, incolis *Christi-*
ansoe, Lille Solvet, Rotter-

en. *Brunnich*, No. 140.
Kittiwake. *Sibbald's hist.*
Scotl. 20.

250. KITTI-
WAKE.

THE length of this species is fourteen inches: the extent three feet two. When arrived at full age, the head, neck, belly, and tail are of a snowy whiteness; behind each ear is sometimes a dusky spot: the back and wings grey: the exterior edge of the first quill-feather, and tips of the four or five next, are black: the bill yellow, tinged with green; inside of the mouth orange: legs dusky, with only a knob instead of the back toe.

It inhabits the romantic cliffs of *Flamborough-head* (where it is called *Petrel*) the *Bass Isle*, the vast rocks near the Castle of *Slains*, in the county of *Aberdeen*, and *Priestholm Isle*.

The young of these birds are a favorite dish
in

in *North Britain*, being served up roasted, a little before dinner, in order to provoke the appetite; but, from their rank taste and smell, seem much more likely to produce a contrary effect.

251. TAR-
ROCK.

La Mouette cendrée. *Briffon* *Larus tridactylus.* *Lin. syst.*
av. 169. 224.
Gavia cinerea alia. *Aldr. av. Faun. Suec.* 157. *sp.*
III. 35. La Mouette cendrée tachetée.
Wil. orn. 346. *Briffon av. VI.* 185. *tab.*
Raii syn. av. 128. 17. *fig. 2.*
Br. Zool. 142.

DESCRIP.

THE length is fourteen inches; the breadth three feet: the weight only seven ounces. The bill is black, short, thick, and strong; the head large: the color of that, the throat, neck, and whole under side are white: near each ear, and under the throat, is a black spot: on the hind part of the neck is a black crescent, the horns pointing to the throat.

The back and scapulars are of a bluish grey: the lesser coverts of the wings dusky, edged with grey; the larger next to them of the same color; the rest grey: the exterior sides, and ends of the four first quill-feathers are black: the tips of the two next black; all the rest wholly white: the ten middle feathers of the tail white, tipped with black; the two outmost quite white: the legs of a dusky ash color.

In

In lieu of the back toe, it has only a small protuberance.

This species breeds on *Priestholme Isle*, also among the former in *Scotland*. I must retract my opinion of its being the young of that species.

Cephus <i>Turneri</i> . <i>Gesner av.</i>	Puit. <i>Fuller's Brit. Worthies.</i>	252. BLACK HEAD.
249.	318.	
Larus cinereus tertius. <i>Aldr.</i>	La Mouette rieuse a pattes	
<i>av.</i> III. 35.	rouges. <i>Briffon av.</i> VI. 196.	
Pewit, or Black Cap, Sea	Gabbiano cinerizio col rostro,	
Crow, Mire Crow. <i>Wil.</i>	e col li piedi rossi. <i>Zinan.</i>	
<i>orn.</i> 347.	115.	
<i>Raii syn. av.</i> 128. <i>itin.</i> 217.	Larus ridibundus. <i>Lin. syst.</i>	
Pewit. <i>Plott's hist. Staff.</i> 231.	225.	
	<i>Br. Zool.</i> 143.	

THESE birds breed in vast numbers in the islands of certain pools in the county of *Stafford*; and, as Dr. *Fuller* tells us, in another on the *Essex* shores; also in the Fens of *Lincolnshire*. They are birds of passage; resort there in the spring; and after the breeding season disperse to the sea coasts: they make their nest on the ground, with rushes, dead grass, and the like; and lay three eggs of a dirty olive color, marked with black. The young were formerly highly esteemed, and numbers were annually taken and fattened for the table. *Plott* gives a marvellous account of their attachment to the lord of the soil they inhabit; insomuch, that

on

on his death, they never fail to shift their quarters for a certain time.

Whitelock, in his annals, mentions a piece of ground near *Portsmouth*, which produced to the owner forty pounds a year by the sale of *Pewits*, or this species of gull. These are the *See-gulles* that in old times were admitted to the noblemens tables*.

DESCRIP. The notes of these gulls distinguish them from any others; being like a hoarse laugh. Their weight is about ten ounces: their length fifteen inches; their breadth thirty-seven: their irides are of a bright hazel: the edges of the eye-lids of a fine scarlet; and on each, above and below, is a spot of white feathers. Their bills and legs are of a sanguine red: the heads and throats black or dusky: the neck, and all the under side of the body, and the tail, a pure white: back and wings ash colored: tip, and exterior edge of the first quill-feather black; the rest of that feather white; the next to that tipped with black, and marked with the same on the inner web.

A VARIETY. *La Grande Mouette blanche. Wil. orn. 348. Raii syn. av. Belon. 170. Larus canus. Scopoli, No. 104.*

THIS was taken in a trap near my house, January 25th, 1772, and seemed only a varie-

* *Vide Appendix.*

ty

ty of the former. It differed in having the edges of the eye-lids covered with white soft feathers. The forepart of the head white; the space round the eyes dusky: from the corner of each eye is a broad dusky bar, furrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three first quill-feathers black; the ends and interior sides only of the two next black, but the shafts and middle part white; the tips of the two next white; beneath a black bar: the rest, as well as the secondaries, ash color.

In all other respects it resembled the common pewit gull. The fat was of a deep orange color.

The brown Tern. *Wil. orn.* *Sterna nigra. Lin. syst.* 227. 253. BROWN.
352. *Faun. Suec. sp.* 159.
Sterna fusca. Raii syn. av. *Br. Zool.* 143.
131.

MR. Ray has left us the following obscure account of this bird; communicated to him by Mr. Johnson, a *Yorkshire* gentleman. "The whole under side is white; the upper brown: the wings partly brown, partly ash color: the head black: the tail not forked: these birds fly in companies."

DESCRIP.

From

From the description, we suspect this bird to be the young of the *greater Tern*, that had not yet attained its proper colors, nor the long feathers of the tail, which it does not acquire till mature age.

GREAT & LESSER TERNS.



BILL strait, slender, pointed.

NOSTRILS linear.

TONGUE slender and sharp.

WINGS very long.

TAIL forked.

TOES, a small back toe.

XLIV.
TERN*.

Sterna (Stirn, Spyrer, Schnirring) *Gesner av.* 586.

Aldr. av. III. 35.

The Sea Swallow. *Wil. orn.* 352.

Raii syn. av. 131.

Sterna major, la grande Hirondelle de mer. *Briffon av.*

VI. 203. *tab.* 19. *fig.* 1.

Sterna hirundo. *Lin. f. f.* 227.

Tarna. *Faun. Suec. sp.* 159.

The Kirmew. *Marten's Spitzberg.* 92.

Islandis Kria. Norvegis Tenne,

Tende, Tendelobe, Sand-

Tolle, Sand-Tærne. *Danis*

Tærne. *Bornholms Kirre,*

Krop-Kirre. *Brunnich,* 151.

Grauer fischer. *Kram.* 345.

Schwartzplattige Schwalben

Moewe. *Frisch,* II. 219.

Br. Zool. 144.

Makauka. *Scopoli,* No. 3.

THIS kind weighs four ounces, one-quarter:

DESCRIP.

the length is fourteen inches; the breadth thirty: the bill and feet are of a fine crimson; the former tipped with black, strait, slender, and sharp pointed: the crown, and hind part of the head, black: the throat, and whole under side of the

* A name these birds are known by in the *North of England*; and which we substitute instead of the old compound one of *Sea Swallow*; which was given them on account of their forked tails.

body,

body, white: the upper part, and the coverts of the wings, a fine pale grey: the tail consists of twelve feathers; the exterior edges of the three outmost are grey, the rest white: the exterior, on each side, is two inches longer than the others: in flying, the bird frequently closes them together, so as to make them appear one slender feather.

These birds frequent the sea shores, banks of lakes and rivers: they feed on small fish, and water insects; hovering over the water, and suddenly darting into it, catch up their prey. They breed among small tufts of rushes; and lay three or four eggs, of a dull olive color, spotted with black. All the birds of this genus are very clamorous.

255. LESSER. *Larus piscator* (Fischerlin, *La petite Hironnelle de mer.*
 Fel.) *Gesner* av. 587. *fig.* *Brissou* av. VI. 206. *tab.*
 588. *19. fig. 2.*
Aldr. av. III. 35. *Larus Minuta.* *Lin. syst.* 228.
Lesser Sea Swallow. *Wil. orn.* *Hætting Tærne.* *Brunnich,*
353. *152.*
Raii syn. av. 131. *Br. Zool.* 144.

DESCRIP.

THE weight is only two ounces five grains: the length eight inches and a half; the breadth nineteen and a half. The bill is yellow, tipped with black: the forehead and cheeks white: from the eyes to the bill is a black line: the top of the head, and hind part black: the breast, and under side of the body clothed with feathers so closely set together,

ther, and of such an exquisite rich gloss, and so fine a white, that no satin can be compared to it: the back and wings of a pale grey: the tail short, less forked than that of the former, and white: the legs yellow: the irides dusky.

These two species are very delicate, and seem unable to bear the inclemency of the weather on our shores* during winter: for we observe they quit their breeding places at the approach of it; and do not return till spring.

The manners, haunts, and food of this are the same with those of the former; but these are far less numerous.

- | | |
|---|---|
| Larus niger (Meyvogelin) <i>Ges-</i> | L'Epouvantail. <i>Briffon</i> av. 256. BLACK. |
| <i>ner</i> av. 588. fig. 589. | VI. 211. tab. 20. fig. 1. |
| <i>Aldr.</i> av. III. 35. | <i>Sterna filipes.</i> <i>Lin. syst.</i> 228. |
| The Scare Crow. <i>Wil. orn.</i> | <i>Sialandis Glitter.</i> <i>Brunnich,</i> |
| 353. | 153. |
| Our black cloven-footed Gull. | <i>Kleinote Moewe.</i> <i>Frisch,</i> II. |
| <i>Idem.</i> 354. | 220. |
| <i>Raii syn.</i> av. 131. <i>Idem.</i> 132. | <i>Br. Zool.</i> 145. |
| No. 6. | |

THIS is of a middle size, between the first and second species. The usual length is ten inches; the breadth twenty-four; the weight two ounces and a half. The head, neck, breast, and

DESCRIP.

* *North Wales.*

belly, as far as the vent, are black; beyond is white: the male has a white spot under its chin: the back and wings are of a deep ash color: the tail is short and forked; the exterior feather on each side is white; the others ash colored: the legs and feet of a dusky red. Mr. Ray calls this a cloven-footed gull; as the webs are depressed in the middle, and form a crescent. These birds frequent fresh waters; breed on their banks, and lay three small eggs of a deep olive color, much spotted with black.

They are found during spring and summer in vast numbers in the Fens of *Lincolnshire*; make an incessant noise, and feed as well on flies as water insects and small fish.

Birds of this species are seen very remote from land. *Kalm* saw flocks of hundreds in the *Atlantic* ocean, midway between *England* and *America*; and a later voyager assured me he saw one 240 leagues from the *Lizard*, in the same ocean.

STORMY PETREL.



FULMAR.

Nº 257.



BILL strait, hooked at the end.

NOSTRILS cylindric, tubular.

LEGS naked above the knees.

BACK TOE none : instead, a sharp SPUR pointing downwards.

XLV.
PETREL.

Wil. orn. 395.

Fulmar. *Martin's voy. St.*

Kilda. 30. *Deser. west.*

Isles. 283.

Fulmer. *Macaulay's hist. St.*

Kilda. 145.

Haffhest. *Clusii exot.* 368.

Procellaria cinerea, le Petrel cendré. *Briffon av.* VI.

143. *tab.* 12. *fig.* 2.

Pl. enl. 59.

Lin. syst. 213.

The Malle-mucke. *Martin's*

Spitzberg. 93.

Hav-Hest. *Gunner, tab.* 1.

Procellaria glacialis. *Brunnich ornich.* 118.

Norvegis Hav-Hest, Malle-moke V. Malle-muke. *Brunnich,* 118.

Br. Zool. 145.

257. FULMAR.

THIS species inhabits the isle of *St. Kilda*; makes its appearance there in *November*, and continues the whole year, except *September* and *October*; it lays a large, white, and very brittle egg; and the young are hatched the middle of *June*. No bird is of such use to the islanders as this: the *Fulmar* supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their distempers. The *Fulmar* is also a certain prognosticator of the change of the wind; if it comes

to land, no west wind is expected for some time; and the contrary when it returns and keeps the sea.

The whole genus of *Petrels* have a peculiar faculty of spouting from their bills, to a considerable distance, a large quantity of pure oil; which they do by way of defence, into the face of any that attempts to take them: so that they are, for the sake of this *panacea*, seized by surprize; as this oil is subservient to the above-mentioned medical uses. *Martin* tells us, it has been used in *London* and *Edinburgh* with success, in *Rheumatic* cases.

DESCRIP.

The size of this bird is rather superior to that of the common gull: the bill very strong, much hooked at the end, and of a yellow color. The nostrils are composed of two large tubes, lodged in one sheath: the head, neck, whole under side of the body, and tail, are white; the back, and coverts of the wings ash colored: the quill-feathers dusky: the legs yellowish. In lieu of a back toe, it has only a sort of spur, or sharp strait nail. These birds feed on the blubber or fat of whales, &c. which, being soon convertible into oil, supplies them constantly with means of defence, as well as provision for their young, which they cast up into their mouths. They are likewise said to feed on *forrel*, which they use to qualify the unctious diet they live on.

Frederick Martens, who had opportunity of seeing vast numbers of these birds at *Spitzbergen*, observes, that they are very bold, and resort after the whale
fishers

fishers in great flocks, and that when a whale is taken, will, in spite of all endeavours, light on it and pick out large lumps of fat, even when the animal is alive. That the whales are often discovered at sea by the multitudes of *Mallemuckes* flying; and that when one of the former are wounded, prodigious multitudes immediately follow its bloody track. He adds, that it is a most gluttonous bird, eating till it is forced to disgorge its food.

- | | | |
|-------------------------------------|---|-----------------------|
| Avis Diomedea, Antenna. | Procellaria Puffinus. <i>Lin. syst.</i> | 258. SHEAR-
WATER. |
| <i>Aldr. av.</i> III. 36. | 213. | |
| Manks Puffin. <i>Wil. orn.</i> 333. | Puffinus, le Puffin. <i>Briffon</i> | |
| <i>Raii syn. av.</i> 134. | <i>av.</i> VI. 131. <i>tab.</i> 12. <i>fig.</i> | |
| Shear water. <i>Idem.</i> 133. | 1. is a variety of it. | |
| <i>Wil. orn.</i> 334. | <i>Feroensibus</i> Skrabe. <i>Norvegis</i> | |
| Patines de oviedo. <i>Raii syn.</i> | Skraap, Pullus. <i>Feroensibus</i> | |
| <i>av.</i> 191. | Liere. <i>Brunnich,</i> 119. | |
| <i>Edw. av.</i> 359. | Manks Petrel. <i>Br. Zool.</i> 146. | |

THE length of this species is fifteen inches; the breadth thirty-one: the weight seventeen ounces: the bill is an inch and three-quarters long; nostrils tubular, but not very prominent: the head, and whole upper side of the body, wings, tail, and thighs, are of a footy blackness; the under side from chin to tail, and inner coverts of the wings, white: the legs weak, and compressed sideways; dusky behind, whitish before.

These birds are found in the *Gulf of Man*: and

as Mr. Ray supposes in the *Scilly-isles*: they resort to the former in *February*; take a short possession of the rabbit burrows, and then disappear till *April*: they lay one egg, white and blunt at each end; and the young are fit to be taken the beginning of *August*; when great numbers are killed by the person who farms the isle: they are salted and barelled; and when they are boiled, are eaten with potatoes. During the day they keep at sea, fishing; and towards evening return to their young; whom they feed, by discharging the contents of their stomachs into their mouths; which by that time is turned into oil: by reason of the backward situation of their legs they sit quite erect. They quit the isle the latter end of *August*, or beginning of *September*; and, from accounts lately received from navigators, we have reason to imagine, that like the *storm-finch*, they are dispersed over the whole *Atlantic* ocean.

This species inhabits also the *Orkney* isles, where it makes its nest in holes on the earth near the shelves of the rocks and headlands; it is called there the *Lyre*; and is much valued there, both on account of its being a food, and for its feathers. The inhabitants take and salt them in *August* for winter provisions, when they boil them with cabbage. They also take the old ones in *March*; but they are then poor, and not so well tasted as the young: they appear first in those islands in *February*.

- The Storm-finch. *Clusii exot.* av. VI. 140. *tab.* 13. *fig.* 1. 259. STORMY
 368.
Wil. orn. 395.
 Small Petrel. *Edw. av.* 90. *Procellaria pelagica. Lin. syst.*
Borlase's Cornwall. 247. *tab.* 212. *Scopoli, No.* 95.
 29. Stromwaders vogel. *Faun.*
Suec. sp. 143.
 The Gourder. *Smith's hist.* *Norvegis Soren Peder. St.*
Kerry. 186. Peders Fugl, Vesten-vinds
 Affilag. *Martin's voy. St.* Are Sonden-vinds Fugl,
Kilda. 34. Uveyrs Fugl: *nonnullis,*
Sib. hist. Fife. 48. Hare. *Feroensibus* Strunkvit.
Brun. 117.
Procellaria, le Petrel. Briffon Little Petrel. *Br. Zool.* 146.

THIS bird is about the bulk of the house swallow: the length six inches; the extent of wings thirteen. The whole bird is black, except the coverts of the tail and vent-feathers, which are white: the bill is hooked at the end: the nostrils tubular: the legs slender, and long. It has the same faculty of spouting oil from its bill as the other species: and Mr. *Brunnich* tells us, that the inhabitants of the *Ferroe isles* make this bird serve the purposes of a candle, by drawing a wick through the mouth and rump, which being lighted, the flame is fed by the fat and oil of the body. Except in breeding time it is always at sea; and is seen all over the vast *Atlantic* ocean, at the greatest distance from land; often following the vessels in great flocks, to pick up any thing that falls from on board: for trial sake chopped straw has been

DESCRIP.

flung over, which they would stand on with expanded wings; but were never observed to settle on, or swim in the water: it presages bad weather, and cautions the seamen of the approach of a tempest, by collecting under the stern of the ships: it braves the utmost fury of the storm, sometimes skimming with incredible velocity along the hollows of the waves, sometimes on the summits: *Clusius* makes it the *Camilla* of the sea.

Vel mare per medium fluctu suspensa tument
Ferret iter, celeres nec tingeret æquore plantas. VIRGIL.

She swept the seas, and as she skim'd along,
Her flying feet unbath'd on billows hung. DRYDEN.

These birds are the *Cypseli* of *Pliny*, which he places among the *Apodes* of *Aristotle*; not because they wanted feet, but were *Κακόποδα* *, or had bad, or useless ones; an attribute he gives to these species, on a supposition they were almost always on the wing. *Hardouin*, a critick quite unskilled in natural history, imagines them to be martins, the *Cypseli* of *Aristotle* †: but a little attention to the text of each of those antient naturalists, is sufficient to evince that they are very different birds; the latter very accurately describes the characters of that species of swallow: while *Pliny* expresses the very manner of life of our *Petrel*.

* *Arist.* 17.

† *P.* 1067.

“ Nidificant in scopulis, hæ sunt quæ toto mari cernuntur: nec unquam tam longo naves, tamque continuo cursu recedunt a terra, ut non circumvolitent eas Apodes.” *Lib. x. c. 39.*

In *August* 1772, I found them on the rocks called *Macdonald's Table*, off the north end of the *Isle of Skie*; so conjecture they breed there. They lurked under the loose stones, but betrayed themselves by their twittering noise.

XLVI.
MERGAN-
SER.

BILL slender, furnished at the end with a crooked nail. Edges of each mandible sharply serrated.
NOSTRILS near the middle of the mandible.
Small, sub-ovated.
TONGUE slender.
FEET, exterior toe longer than the middle.

260. GOOS-
ANDER.

Mergus cirrhatus (fam.) *Gef-*
ner av. 134. *Merganser*
(Merrach) 135.
Aldr. av. III. 113.
Goosander. Wil. orn. 335.
Dun diver, or Sparling-fowl.
ibid.
Raii syn. av. 134.
Merganser, l'Harle. Brisson
av. VI. 231. *Tab.* 22.
Meer-rache. Kram. 343.

See-Rache. Frisch, II. 190,
191.
Mergus merganser. Lin. syst.
208.
Wrakfogel, Kjorkfogel, Ard,
Skraka. Faun. Suec. sp. 135.
Pekfok. Crantz's Greenl. I. 80.
Islandis Skior-And. Danis
Skallefluger. Brunnich, 92,
& 93.
Br. Zool. 147.

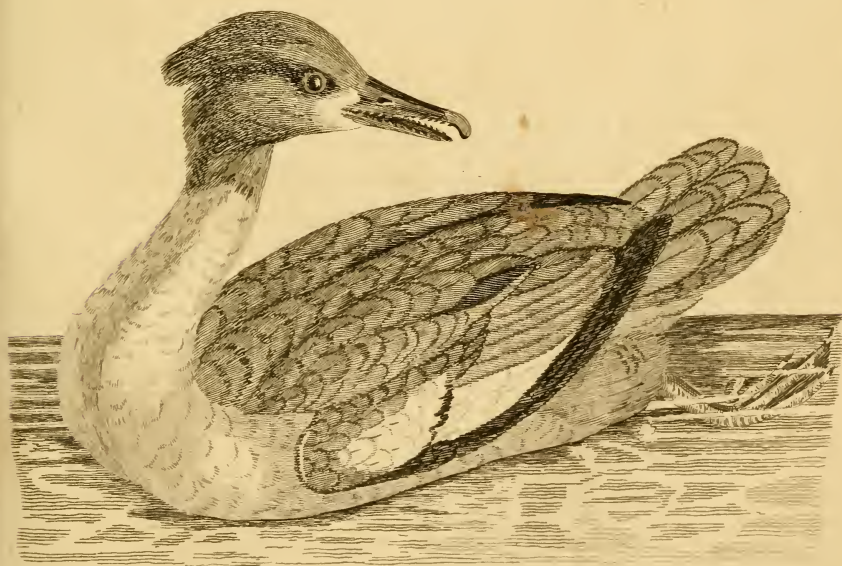
THESE birds frequent our rivers, and other fresh waters, especially in hard winters; they are great divers, and live on fish. They are never seen in the southern parts of *Great Britain* during summer; when they retire far north to breed; for in that season they have been shot in the *Hebrides*. They are uncommonly rank, and scarcely eatable.

DESCRIP.

The male weighs four pounds: its length is two feet four inches; the breadth three feet two.

The

M. & F. GOOSANDER.





The bill is three inches long, narrow, and finely toothed, or serrated: the color of that, and the irides, is red.

MALE.

The head is large, and the feathers on the hind part long and loose: the color black, finely glossed with green: the upper part of the neck the same: the lower part, and under side of the body of a fine pale yellow: the upper part of the back, and inner scapulars are black: the lower part of the back, and the tail are ash colored: the tail consists of eighteen feathers: the greater quill-feathers are black, the lesser white, some of which are edged with black: the coverts at the setting on of the wing are black; the rest white: the legs of a deep orange color.

The *dun Diver*, or female, is less than the male: DUN DIVER. the head, and upper part of the neck are ferruginous; the throat white: the feathers on the hind part are long, and form a pendent crest: the back, the coverts of the wings, and the tail are of a deep ash color: the greater quill feathers are black, the lesser white: the breast, and middle of the belly are white, tinged with yellow.

We believe that *Belon** describes this sex under the title of *Bieure oyseau*, and asserts, that it builds its nest on rocks and in trees like the Corvorant.

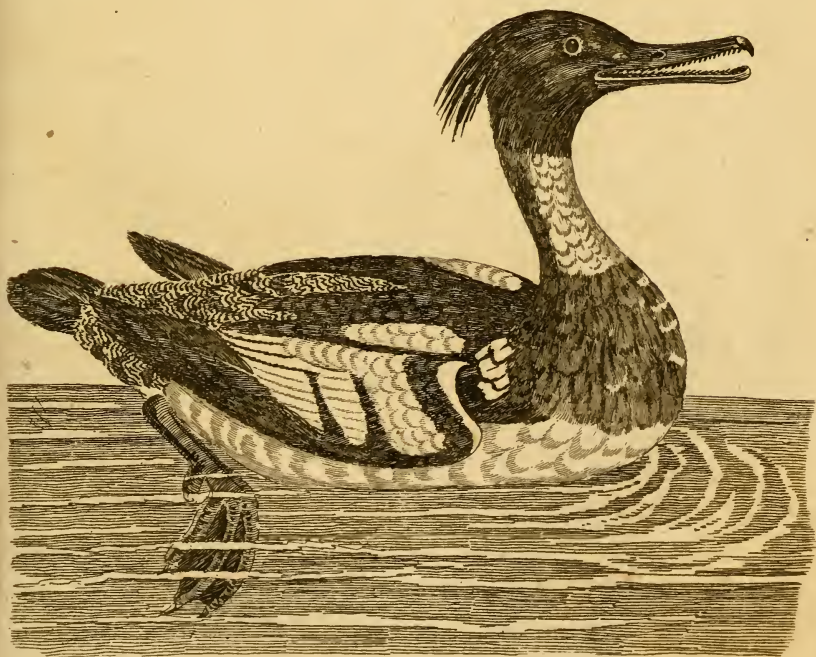
* *Belon av.* 163.

261. RED BREASTED. *Anas Longirostra*. *Gesner av.* Braun kopfiger Tilger, 133. *Aldr. av.* III. 113. Taucher. *Kram.* 343.
The Serula. Wil. orn. 336. *Mergus ferrator. Lin. syst.*
Raii syn. av. 135. 208.
 Lesser toothed Diver. *Mor-* Pracka. *Faun. Suec. sp.* 136.
ton's Northampt. 429. *Danis Fisk-And. Brunnich,*
L' Harle hupé. Briffon av. 96.
 VI. 237. *Br. Zool.* 147.

DESCRIP.

THIS species weighs two pounds: the length is one foot nine inches; the breadth two feet seven: the bill is three inches long; the lower mandible red; the upper dusky: the irides a purplish red: head and throat a fine changeable black and green: on the first a long pendent crest of the same color: upper part of the neck, of the breast, and the whole belly white: lower part of the breast ferruginous, spotted with black: upper part of the back black: near the setting on of the wings some white feathers, edged and tipped with black: the exterior scapulars black; the interior white: lower part of the back, the coverts of the tail, and feathers on the sides under the wings and over the thighs grey, elegantly marked with ziczag lines of black: coverts on the ridge of the wings dusky; then succeeds a broad bar of white: the greater coverts half black, half white: the secondaries next the quill feathers marked in the same manner; the rest white, edged on one side with black: the quill feathers

M. & F. RED-BREASTED GOOSANDER.



M. Griffiths del

feathers dusky. Tail short and brown: legs orange colored.

The head and upper part of the neck of the *female* of a deep rust color: the crest short: throat white: fore part of the neck and breast marbled with deep ash color: belly white: great quill-feathers dusky: lower half of the nearest secondaries black; the upper white; the rest dusky: back, scapulars, and tail ash colored. The upper half of the first secondary feathers white; the lower half black: the others dusky.

These birds breed in the northern parts of *Great Britain*; we have seen them and their young on *Loch Mari* in the county of *Ross*, and in the isle of *Ilay*.

- | | |
|---|---|
| La Piette. <i>Belon av.</i> 171. | Lepetit charle hupèou le Piette. 262. S MEW. |
| Mergus rhenanus. <i>Gesner av.</i> 131. | <i>Briffon av.</i> VI. 243. Tab. |
| <i>Aldr. av.</i> III. 111. | 24. fig. 1. & 2. |
| White Nun. <i>Wil. orn.</i> 337. | <i>Kram.</i> 344. |
| Lough Diver. 338. | Kreutz-Ente (Cross-Duck) |
| <i>Raii syn. av.</i> 135. | <i>Frisch, II.</i> 172. |
| Mergus albellus. <i>Lin. syst.</i> 209. | <i>Cimbris Hviid Side. Brunnich,</i> |
| <i>Faun. Suec. sp.</i> 137. | 97. |
| | <i>Br. Zool.</i> 148. <i>Scopoli,</i> No. 89. |

ITS weight is thirty-four ounces: the length eighteen inches; the breadth twenty-six. The bill is near two inches long, and of a lead color: the

DESCRIP.

RED HEADED S ME W. CLASS II.

the head is adorned with a long crest, white above, black beneath : from a little beyond the eye to the bill, is a large oval black spot, glossed with green ; the head, neck, and whole under side of the body are of a pure white ; on the lower part of the neck are two femilunar black lines pointing forward : the inner scapulars, the back, the coverts on the ridge of the wing, and the greater quill-feathers are black ; the middle rows of coverts are white ; the next black, tipped with white ; the lesser quill feathers the same ; the scapulars next the wings white : the tail deep ash color : the legs a bluish grey.

The female, or *lough diver*, is less than the male. The marks in the wings are the same in both sexes : the back, the scapulars, and the tail are dusky : the head, and hind part of the neck ferruginous : chin, and fore part of the neck white : the breast clouded with grey : the belly white : the legs dusky.

263. RED
HEADED.

The Weefel Coot. *Ald. av.*
I. p. 84. *Tab.* 88.
Mergus minutus. *Lin. syst.*
209.

Faun. Suec. sp. 138.
L' Harle étoilé. *Briffon av.*
VI. 252.
Br. Zool. 148.

DESCRIP.

THIS bird weighs fifteen ounces : the length is one foot four inches ; the breadth one foot eleven inches : the bill is of a lead color : the head

is

is slightly crested, and of a rust color: from beyond the eyes to the bill is an oval black spot: the cheeks and throat are white: the hind part of the neck is of a deep grey; the fore part clouded with a lighter: the belly white: the back and tail are of a dusky ash color: the legs of a pale ash color: the wings have exactly the same marks and colors with the smew; and as the spaces between the eyes and bill are marked with a similar spot in both, if authors did not agree to make the *lough diver* the female of that bird, we should suppose this to be it.

XLVII.
DUCK.

BILL strong, flat, or depressed, and commonly furnished at the end with a nail. Edges divided into sharp *lamellæ*.

NOSTRILS small and oval.

TONGUE broad, edges near the base fringed.

FEET; middle toe the longest.

264. WILD
SWAN.

Gesner av. 373.

Wild Swan, Elk, or Hooper.

Wil. orn. 356.

Raii syn. av. 136.

Edw. av. 150.

Le Cygne sauvage. *Briffon*

av. VI. 292. *Tab.* 28.

Labod. *Scopoli*, No. 66.

Schwane. *Kram.* 338.

Anas Cygnus ferus. Lin. syst.

194.

Swan. *Faun. Suec. sp.* 107.

Danis. Vild Svane. Cimbris

Snabel-Svane. Brunnich,

94.

Br. Zool. 149. *add. plates.*

THE wild swan frequents our coasts in hard winters in large flocks, but as far as we can inform ourselves does not breed in *Great Britain*. *Martin** acquaints us, that swans come in *October* in great numbers to *Lingey*, one of the *Western Isles*; and continue there till *March*, when they retire more northward to breed. A few continue in *Mainland*, one of the *Orknies*, and breed in the little isles of the fresh water lochs; but the multitude retires at approach of spring. On that account, swans are there the country man's almanack: on

* *Descr. West. Isles*, 71.

their quitting the island, they presage good weather; on their arrival, they announce bad. These, as well as most other water fowl, prefer for the purpose of incubation those places that are least frequented by mankind: accordingly we find that the lakes and forests of the distant *Lapland* are filled during summer with myriads of water fowl, and there swans, geese, the duck tribe, goosanders, divers, &c. pass that season; but in autumn return to us, and to other more hospitable shores*.

This species is less than the tame swan: length five feet to the end of the feet; to that of the tail four feet ten inches: extent of wing seven feet three inches: weight from thirteen to sixteen pounds. The lower part of the bill is black; the base of it, and the space between that and the eyes, is covered with a naked yellow skin; the eyelids are bare and yellow: the whole plumage in old birds is of a pure white; the down is very soft and thick: the legs black. The cry of this kind is very loud, and may be heard at a great distance, from which it is sometimes called the Hooper.

* *Flora Lapponica*, 273. *Oeuvres de M. de Maupertuis*. Tom. III. p. 141, 175. According to the observation of that illustrious writer, the *Lapland* lakes are filled with the *larvæ* of the Knat (*culex pipiens*. *Lin. syst.* 602.) or some other insect, that deposite its eggs in the water; which being an agreeable food to water fowl, is another cause of their resort to those deserts.

265. TAME SWAN. Le Cygne. *Belon av.* 151. *Gesner av.* 371. Cygno, Cifano. *Aldr. av.* III. 1. *Wil. orn.* 355. *Raii syn. av.* 136. *Edw. av.* 150. *Plott's hist. Staff.* 228. Le Cygne. *Briffon av.* VI. 288. *Anas Cygnus mansuetus. Lin.* *yst.* 194. Swan. *Faun. Suec. sp.* 107. Schwan. *Frisch*, II. 152. *Danis Tam Svane. Brunnich*, 44. *Br. Zool.* 149. *add. plates.*

DESCRIP. THIS is the largest of the *British* birds. It is distinguished externally from the wild swan; first, by its size, being much larger: secondly, by the bill, which in this is red, and the tip and sides black, and the skin between the eyes and bill is of the same color. Over the base of the upper mandible projects a black callous knob: the whole plumage in old birds is white; in young ones ash colored till the second year: the legs dusky: but Dr. *Plott* mentions a variety found on the *Trent* near *Rugeby*, with red legs. The swan lays seven or eight eggs, and is near two months in hatching: it feeds on water plants, insects and shells. No bird perhaps makes so inelegant a figure out of the water, or has the command of such beautiful attitudes in that element as the swan: almost every poet has taken notice of it, but none with that justice of description, and in so picturesque a manner, as our *Milton*.

The swan with arched neck
 Between her white wings mantling, proudly rows
 Her state with oary feet. *Par. Lost, B. VII.*

But we cannot help thinking that he had here an eye to that beautiful passage in *Silius Italicus* on the same subject, though the *English* poet has greatly improved on it.

Haud secus *Eridani* stagnis, ripæve *Caystri*
 Innatat albus olor, pronoque immobile corpus
 Dat fluvio, et pedibus tacitas cremigat undas. *Lib. XIV.*

In former times it was served up at every great feast, when the elegance of the table was measured by the size and quantity of the good cheer. Cygnets are to this day fattened at *Norwich* about *Christmas*, and are sold for a guinea a piece.

Swans were formerly held in such great esteem in *England*, that by an act of *Edward IV. c. 6.* “no one that possessed a freehold of less clear yearly value than five marks, was permitted to keep any, *other than the son of our sovereign lord the king.*” And by the eleventh of *Henry VII. c. 17.* the punishment for taking their eggs was imprisonment for a year and a day, and a fine at the king’s will. Though at present they are not so highly valued as a delicacy, yet great numbers are preserved for their beauty; we see multitudes on the *Thames* and *Trent*, but no where greater numbers than on the salt water inlet of the sea, near *Abbotbury* in *Dorsetshire*.

These birds were by the ancients consecrated to *Apollo* and the *Muses*;

— ενθα κυκνος μελωδος.

Μουσας δεραπνευει. *Eurip. Iphig. in Taur. lin. 1104.*

And *Callimachus*, in his hymn upon the island of *Delos*, is still more particular :

— Κυκνοι δε θεου μελποντες αιδοι

Μηνοιον πακτωλον εκυκλωσαντο λιποντες

Εβδομακισ περι Δηλον. επηεισαν δε λοχειη

Μουσων ορνιθες, αιδοταται πετεηνων.

Ενθεν ο παις τοσσαςδε λυρη ενεδησατο χορδας

Τςτερον, οσσακι κυκνοι επ ωδινεσσω αιεισαν :

Ογδοον εκ ετ αιεισαν, ο δ' εκδορεν.

— When from *Paeolus'* golden banks

Apollo's tuneful songsters, snowy swans

Steering their flight, seven times their circling course

Wheel round the island, caroling mean time

Soft melody, the favourites of the Nine,

Thus ushering to birth with dulcet sounds

The God of harmony, and hence sev'n strings

Hereafter to his golden lyre he gave,

For ere the eighth soft concert was begun

He sprung to birth.

Dod's Callimachus; p. 115.

Upon this idea of their being peculiarly consecrated to *Apollo* and the *Muses*, (the deities of harmony) seems to have been ingrafted, the notion the ancients had of swans being endowed with a musical voice. Tho' this might be one reason for the fable; yet, to us there appears another still stronger,
which

which arose from the *Pythagorean* doctrine of the transmigration of the soul into the bodies of animals; from the belief, that the body of the swan was allotted for the mansion of departed poets.

Thus *Plato* makes his prophet say, ἰδεῖν μὲν γὰρ ψυχὴν ἔφη τὴν ποτὲ Ὀρφεὺς γενομένην κυνὸς βίον αἰρῶμεν * . “ I saw the soul of *Orpheus* prefer the life of a swan.”

After the antients had thus furnished these birds with such agreeable inmates, it is not to be doubted but they would attribute to them the same powers of harmony, that poets possessed, previous to their transmigration: but the vulgar not distinguishing between the sweetness of numbers, and that of voice, ignorantly believed that to be real, which philosophers and poets only meant metaphorically.

In time a swan became a common trope for a Bard; *Horace* calls *Pindar Dirœum Cygnum*, and in one ode even supposes himself changed into a swan; *Virgil* speaks of his poetical brethren in the same manner,

Vare, tuum nomen

Cantantes sublime ferent ad fœdera cygni. Eclog. IX.

when he speaks of them figuratively, he ascribes to them melody, or the power of musick; but when he talks of them as birds, he lays aside fiction, and like a true naturalist gives them their real note,

Dant sonitum rauci per stagna loquacia cygni. Æneid. Lib. X. l.

* *De Republ. Lib. X. sub fine.*

Thus he, as well as *Pliny**, in fact, gave no credit to the musick of swans. *Aristotle* speaks of it only by hearsay†, but, when once an error is started, it is not surprizing that it is adopted, especially by poets, geniuses of all others of the most unbounded imaginations. For this reason poets were said to animate swans, from the notion that they flew higher than any other birds, and *Hesiod* distinguishes them by the epithet of κυανοαερισποται‡, “the lofty flying swans”; Thus *Horace*, whilst he humbly compares himself to a bee, contenting itself with the creeping thyme, sends his *Diræum Cygnum* into the clouds

Multa *Diræum* levat aura *cygnum*,

Tendit, *Antori*, quoties in altos

Nubium tractus.

Ode. II. Lib. 4.

but when he finds himself struck with a true poetical spirit, he at once assumes the form of this favourite bird,

Non usitata nec tenui feror

Penna, biformis per liquidum æthera

Vates :

— et album mutor in alitem. *Ode. XX. Lib. 2.*

And doubtless he was on the wing in his first ode,

Sublimi feriam sydera vertice.

* *Lib. X. c. 33.*

† *Hist. an. 1045.*

‡ *Scut. Herc. 1. 316.*

Besides these opinions, the antients held another still more singular, imagining that the swan foretold its own end: to explain this we must consider the twofold character of the poet, *Vates* and *Poeta*, which the fable of the transmigration continue to the bird, or they might be supposed to derive that faculty from *Apollo* * their patron deity, the god of prophecy and divination.

As to their being supposed to sing more sweetly at the approach of death, the cause is beautifully explained by *Plato*, who attributes that unusual melody, to the same sort of *Ecstasy* that good men are sometimes said to enjoy at that awful hour, foreseeing the joys that are preparing for them on putting off mortality, Μαντικοι τε εισι, και προειδότες τα εν Αδε αγαθα, αιδεσι τε, και τερπονται εκεινην την ημεραν διαφεροντως η, εν τω προσθεν χρονω †. “They become prophetic, and foreseeing the happiness which they shall enjoy in another state, are in greater ecstasy than they have before experienced”.

This notion, tho’ accounted for by *Plato*, seems to have been a popular one long before his time, for *Æschylus* alludes to it in his *Agamemnon*; *Clytemnestra* speaking of *Cassandra*, says,

—— η δε τοι, κυνης διην,
Τον υστατον μελψασα θανασιμον γοον,
Κεϊται.

—— She like the swan
Expiring, dies in melody.

* *Platonis Phædo*. Ed. Cantab. 1683. p. 124.

† *Ibid*.

domestic goose. The old geese which are shot, are plucked and sold in the market as fine tame ones; and readily bought, the purchaser being deceived by the size, but their flesh is coarse. Towards winter they collect in great flocks, but in all seasons live and feed in the fens.

The *Grey Lag* is the origin of the *domestic* goose; it is the only species that the *Britons* could take young, and familiarize: the other two never breed here, and migrate during summer. The mallard comes within the same description, and is the species to which we owe our tame breed of ducks: both preserve some of the marks of their wild state; the goose the whiteness of the coverts of the tail and vent-feathers; the drake its curled feathers. The goose in other colors sports less in the tame kind than the other.

Tame geese are of vast longevity. Mr. *Willughby* gives an example of one that attained eighty years. TAME GOOSE

Tame geese are kept in vast multitudes in the fens of *Lincolnshire*; a single person will keep a thousand old geese, each of which will rear seven; so that towards the end of the season he will become master of eight thousand. I beg leave to repeat here part of the history of their œconomy from my tour in *Scotland*, in order to complete my account.

During the breeding season these birds are lodged in the same houses with the inhabitants, and even

even in their very bed-chambers: in every apartment are three rows of coarse wicker pens, placed one above another; each bird has its separate lodge divided from the other, which it keeps possession of during the time of sitting. A person, called a *Gozzard*, i. e. *Goose-berd*, attends the flock, and twice a day drives the whole to water; then brings them back to their habitations, helping those that live in the upper stories to their nests, without ever misplacing a single bird.

FEATHERS.

The geese are plucked five times in the year: the first plucking is at *Lady-Day*, for feathers and quils, and the same is renewed, for feathers only, four times more between that and *Michaelmas*. The old geese submit quietly to the operation, but the young ones are very noisy and unruly. I once saw this performed, and observed, that goslings of six weeks old were not spared; for their tails were plucked, as I was told, to habituate them early to what they were to come to. If the season proves cold, numbers of the geese die by this barbarous custom. At the time, about ten pluckers are employed, each with a coarse apron up to his chin.

Vast numbers of geese are driven annually to *London* to supply the markets, among them all the superannuated geese and ganders (called here *Cagmags*) which, by a long course of plucking, prove uncommonly tough and dry.

The feathers are a considerable article of commerce;

merce; those from *Somersetshire* are esteemed the best; and those from *Ireland* the worst.

It will not here be foreign to the subject to give some account of the feathers that other birds and other countries supply our *Island* with, which was communicated to us by an intelligent person in the feather trade.

Eider down is imported from *Denmark*, the ducks that supply it being inhabitants of *Hudson's-Bay*, *Greenland*, *Iceland* and *Norway*; our own islands west of *Scotland* breed numbers of these birds, and might turn out a profitable branch of trade to the poor inhabitants. *Hudson's-Bay* also furnishes a very fine feather, supposed to be of the goose kind.

The down of the swan is brought from *Dantzick*. The same place also sends us great quantity of the feathers of the cock and hen. The *London* poulterers sell a great quantity of the feathers of those birds, and of ducks and turkies; those of ducks being a weaker feather, are inferior to those of the goose; turkey's feathers are the worst of any.

The best method of curing feathers is to lay them in a room in an exposure to the sun, and when dried to put them in bags, and beat them well with poles to get the dirt off.

We have often been surprized that no experiments had been made on the feathers of the *Auk* tribe, as such numbers resort to our rocks annually,

ally, and promise, from the appearance of their plumage, to furnish a warm and soft feather; but we have lately been informed, that some unsuccessful trials have been made at *Glasgow*: a gentleman who had made a voyage to the western isles, and brought some of the feathers home with a laudable design of promoting the trade of our own country, attempted to render them fit for use, first by baking, then by boiling them; but their stench was so offensive, that the *Glasgow* people could not be prevailed on to leave off their correspondence with *Dantzick*. The disagreeable smell of these feathers must be owing to the quantity of oil that all water fowls use from the glandules of their rump to preserve and smooth their feathers; and as sea birds must expend more of this unction than other water fowl, being almost perpetually on that element, and as their food is entirely fish, that oil must receive a great rankness, and communicate it to the plumage, so as to render it absolutely unfit for use.



BEAN GOOSE.



- L'Oye privée, L'Oye Sauvage. *Belon av.* 156. 158.
Gesner av. 142. 158.
Aldr. av. III. 42. 67. *Phil. Tr.* II. 852.
 Tame Goose, common wild Goose. *Wil. orn.* 358. *sp.* 1, 2.
Raii syn. av. 136. *sp.* 3, 4.
 L'Oye domestique, L'Oye Sauvage. *Briffon av.* VI. 262, 265.
 Oca domestica, Salvatica, Baletta. *Zinan.* 104.
 Gus dikaya. *Rufs. N. Com.* Petr. IV. 418.
 Wild gänfs, Einheimische gänfs. *Kram.* 338. *Frisch,* II. 155, 157.
 Anas anser mansuetus—ferus. *Lin. syst.* 197.
 Gas—will gas. *Faun. Suec.* *sp.* 114.
Crantz's Grænl. I. 80.
 Danis Tam Gaas. *Brunnich,* 55.
Br. Zool. 150.

267. BEAN-GOOSE.

THE length of this species is two feet seven inches: the extent four feet eleven: the weight six pounds and a half. The bill which is the chief specific distinction between this and the former is small, much compressed near the end, whitish and sometimes pale red in the middle; and black at the base and nail: head and neck are cinereous brown, tinged with ferruginous: breast and belly dirty white, clouded with cinereous: sides and scapulars dark ash color, edged with white: the back of a plain ash color: coverts of the tail white: lesser coverts of the wings light grey, nearly white; the middle deeper tipped with white: primaries and secondaries grey, tipped with black: feet and legs saffron color: claws black.

DESCRIP.

This species arrives in *Lincolnshire* in autumn, and

HISTORY.

and is called there the *bean goose*, from the likeness of the nail of the bill to a horse bean. They always light on corn fields, and feed much on the green wheat.

They never breed in the fens; but all disappear in *May*. They retreat to the sequestred wilds of the north of *Europe*: in their migration they fly a great height, cackling as they go. They preserve a great regularity in their motions, sometimes forming a strait line, at others assume the shape of a wedge, which facilitates their progress; for they cut the air the readier in that form than if they flew pell-mell.

268. WHITE
FRONTED.

The laughing Goose. *Edw. Briffon av. VI. 269.*
av. 153. Polnische Gans. Kram. 339.
Anas erythropus (fæm.): Danis Vild Gaas. Brunnich,
Lin. syst. 197. 53.
Fiællgas. Faun. Suec. sp. 116. Br. Zool. 150.
L'Oye sauvage du nord.

DESCRIP.

THE weight of this kind is about five pounds and a half: the length two feet four: the extent four feet six: the bill elevated, of a pale yellow color, with a white nail. The forehead white: head and neck of the same color with those of the former: the coverts of the wing; the primaries and secondaries darker: in the tail the ash color predominates: it is like the two preceding, surrounded

rounded with a white ring. The breast and belly of a dirty white, marked with great spots of black: the legs yellow: the nails whitish.

These visit the fens and other parts of *England* during winter, in small flocks: they keep always in marshy places, and never frequent the corn lands. They disappear in the earliest spring, and none are seen after the middle of *March*. *Linnaeus* makes this goose the female of the *Bernacle*; but we think his opinion not well founded.

Doctor *Lister* adds two other species to the list of *English* geese; one he calls the *great Black Goose* or *Whilk*; the other the *small Spanish Goose*, which he says is of the same color with the common goose, but is no larger than the *Brent*; but each species has hitherto eluded our most diligent enquiry.

I must conclude this subject with observing that the goose was one of the forbidden foods of the *Britons* in the time of *Cæsar*.

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| L'Oye nonnette ou Cravant. | La Bernache. | <i>Briffon av.</i> VI. |
| <i>Belon av.</i> 158. | | 300. |
| Brenta, vel Bernicla. <i>Gesner</i> | <i>Anas Erythropus (mas), Lin.</i> | |
| <i>av.</i> 109. 110. | <i>syf.</i> 197. | |
| <i>Aldr. av.</i> III. 73. <i>Phil. Tr.</i> | <i>Fiællgas. Faun. Suec. sp.</i> 116. | |
| II. 853. | <i>Schottische Gans. Frisch, II.</i> | |
| Bernacle, or Clakis. <i>Wil. orn.</i> | | 189. |
| <i>Raii syn. av.</i> 137. | <i>Anser brendinus. Caii opusc.</i> | |
| <i>Sibb. hist. Scot.</i> 21. | | 87. |
| <i>Gerard's Herbal.</i> 1587. | <i>Crantz's Greenl. I.</i> 80. | |
| | <i>Br. Zool.</i> 150. | |

269. BERNACLE.

THIS bird weighs about five pounds; the length is two feet one inch; the breadth four feet

DESCRIP.

feet five inches; the bill is black, and only one inch three-eighths long; the head is small; the forehead and cheeks white; from the bill to the eyes is a black line; the hind part of the head, the whole neck, and upper part of the breast and back are of a deep black; the whole underside of the body, and coverts of the tail are white; the back, scapulars and coverts of the wings, are beautifully barred with grey, black, and white; the tail is black, the legs of the same color, and small.

These birds appear in vast flocks during winter, on the north west coasts of this kingdom: are very shy and wild; but on being taken, grow as familiar as our tame geese in a few days; in *February* they quit our shores, and retire as far as *Lapland*, *Greenland* and even *Spitzbergen* to breed*.

They live to a great age: the Rev. Doctor *Buckworth* of *Spalding* had one which was kept in the family above two and thirty years; but was blind during the two last: what its age was when first taken was unknown.

These are the birds that about two hundred years ago were believed to be generated out of wood, or rather a species of shell that is often found sticking to the bottoms of ships, or fragments of them; and were called *Tree-geese*†. These were also

* *Amœn. Acad.* VI. 585. *Barent's voy.* 19.

† The shell here meant is the *lepas anatifera*. *Lin. syst.* 663. *Argenville Conch.* tab. 7. the animal that inhabits it is furnished with a feathered beard; which, in a credulous age, was believed to be part of the young bird.

thought

thought by some writers to have been the *Chenalopeces* of *Pliny*: they should have said *Chenerotes*; for those were the birds that naturalist said were found in *Britain*; but as he has scarce left us any description of them; it is difficult to say which species he intended. I should imagine it to be the following; the *Brent-goose*, which is far inferior in size to the wild goose, and very delicate food *: in both respects suiting his account of the *Cheneros*.

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| Les Canes de Mer. <i>Belon</i> av. | <i>Belgis</i> Rotgans, <i>Calmariensibus</i> | 270. BRENT. |
| 166. | <i>Prutgas</i> . <i>Faun. Suec.</i> sp. 115. | |
| <i>Aldr.</i> av. III. 73. | <i>Cimbris</i> Ray-v | Rad-Gaas. |
| <i>Wil. orn.</i> 360. | <i>Norvegis</i> Raat-v. | Raatne. |
| <i>Raii syn.</i> av. 137. | Gaas. item Goul-v. | Gagl. |
| <i>Bernacle. Nat. hist. Ireland.</i> | <i>Brnnnich</i> , 52. | |
| 192. | <i>Baum-Gans. Frisch</i> , II. 156. | |
| <i>Brenta, le Cravant. Briffon</i> av. | <i>Br. Zool.</i> 151. | |
| VI. 304. tab. 31. | <i>Branta Bernicla. Scopoli</i> , No. | |
| <i>Anas Bernicla. Lin. syst.</i> 198. | 84. | |

THIS is inferior in size to the former: the bill is one inch and an half long; the color of that, the head, neck, and upper part of the breast is black; on each side the slenderest part of the neck is a white spot; the lower part of the breast, the scapulars, and coverts of the wings are ash colored, clouded with a deeper shade; the feathers

DESCRIP.

* *Anserini generis sunt Chenalopeces: et quibus lantiores epulas non novit Britannia Chenerotes, fere anseres minores.*
Lib. x. c. 22.

above and below the tail are white; the tail and quill-feathers black; the legs black.

These birds frequent our coasts in the winter: in *Ireland* they are called *Bernacles*, and appear in great quantities in *August*, and leave it in *March*. They feed on a sort of long grafs growing in the water; preferring the root and some part above it, which they dive for, bite off and leave the upper part to drive on shore. They abound near *Londonderry*, *Belfast*, and *Wexford*; and are taken in flight time in nets placed a-cross the rivers; and are much esteemed for their delicacy. The *Rat* or *Roadgoose*, of Mr. *Willughby**, agrees in so many respects with this kind, that we suspect it only to be a young bird not come to full feathers: the only difference consisting in the feathers next the bill, and on the throat and breast being brown. We have the greater reason to imagine it to be so as Mr. *Brunnich* informs us that the *Danish* and *Norwegian* names for this bird are *Radgaas* and *Raatgaas*, which agree with those given it by Mr. *Willughby*. Mr. *Willughby*, Mr. *Ray*, and M. *Brisson* very properly describe the *Bernacle* and *Brent* as different species, but *Linnaeus* makes these synonymous, and describes the true *Bernacle* as the female of the white fronted wild goose. Vide *Faun. Suec.* 116.

after that, she will still lay ; but the drakes must supply the down, as her stock is now exhausted ; but if her eggs are taken a third time, she wholly deserts the place.

When I visited the *Farn isles**, I found the ducks sitting, and took some of the nests, the base of which were formed of sea plants, and covered with the down. After separating it carefully from the plants, it weighed only three quarters of an ounce, yet was so elastic as to fill a larger space than the crown of the greatest hat. These birds are not numerous on the isles ; and it was observed that the drakes kept on those most remote from the sitting places. The ducks continue on their nests till you come almost close to them, and when they rise are very slow fliers. The number of eggs in each nest were from three to five, warmly bedded in the down ; of a pale olive color, and very large, glossy and smooth.

DESCRIP.

This kind is double the size of the common duck : its bill is black ; the feathers of the forehead and cheeks advance far into the base, so as to form two very sharp angles : the forehead is of a full velvet black : from the bill to the hind part of the head is a broad black bar, passing across the eyes on each side : on the hind part of the neck, just beneath the ends of these bars, is a broad pea-green mark, that looks like a stain :

* July 15th. 1769.

M. & F. VELVET DUCK.



the crown of the head, the cheeks, the neck, back, scapulars and coverts of the wings are white; the lower part of the breast, the belly, tail, and quail feathers are black; the legs are green.

The female is of a reddish brown, barred transversely with black; but the head and upper part of the neck are marked with dusky streaks pointing downward; the primary feathers are black; the greater or last row of coverts of the wings, and the lesser row of quail feathers tipped with white: the tail is dusky; the belly of a deep brown, marked obscurely with black. One I weighed was three pounds and a half.

FEMALE.

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| <i>Anas nigra</i> , rostro nigro rubro et luteo. <i>Aldr. av.</i> III. 97. | <i>Faun. Suec. sp.</i> 109. | 272. VELVET. |
| The black Duck. <i>Wil. orn.</i> 363. | <i>Gunner. Tab.</i> V. | |
| <i>Raii syn. av.</i> 141. | <i>Incolis Christianse</i> Sværte. | |
| <i>Dale's hist. Harwich</i> , 405. | <i>Norvegis</i> Soc-Orre, Hav- | |
| <i>Turpan. N. Com. Petr.</i> IV. 420. | Orre v. Sav-Orre, quibus- | |
| <i>La grande Macreuse. Brisson av.</i> VI. 423. | dam Sorte. <i>Brunnich</i> , 48. | |
| <i>Anas fusca. Lin. syst.</i> 190. | <i>Nordische schwarzte Ente.</i> | |
| | <i>Frisch</i> , II. 165. <i>Supl.</i> | |
| | <i>Br. Zool.</i> 152. <i>Scopoli</i> , No. 68. | |

THE male of this species is larger than the tame duck. The bill is broad and short, yellow on the sides, black in the middle, and the hook red: the head, and part of the neck is black tinged with green: behind each ear is a white spot;

DESCRIP.

spot; and in each wing is a white feather; all the rest of the plumage is of a fine black, and of the soft and delicate appearance of velvet: the legs and feet are red; the webs black. The female is entirely of a deep brown color; the marks behind each ear and on the wings excepted: the bill is of the same colors with that of the male; but wants the protuberance at the base of it, which *Linnaeus* gives the male*.

273. SCOTER. Black Diver, or Scoter. *Wil.* La Macreuse. *Briffon av.* VI.
orn. 366. 420. *Tab.* 38. *fig.* 2.
Raii syn. av. 141. *Anas nigra.* *Lin. syst.* 196.
La Macreuse. *Ray's Letters,* *Faun Suec. sp.* 110.
161. *Br. Zool.* 153.
Dale's hist. Harwich, 405.

DESCRIP. **T**HIS species weighs two pounds nine ounces: the length is twenty-two inches; the breadth thirty-four: the middle of the bill is of a fine yellow, the rest is black: both male and female want the hook at the end; but on the base of the bill of the former is a large knob, divided by a fissure in the middle. The tail consists of sixteen sharp pointed feathers, of which the middle are the longest. The color of the whole plumage is black, that of the head and neck glossed over with purple: the legs are black.

* *Faun. Suec. last edit.* 39.

This bird is allowed in the *Romish church* to be eaten in *Lent*, and is the *macreuse* of the *French*. It is a great diver, said to live almost constantly at sea, and to be taken in nets placed under water.

- Un petit Plongeon espece de Canard. *Belon av.* 175.
 Straufs endt. *Gesner av.* 107.
 Querquedula Cristata. *Aldr. av.* III. 91.
Wil. orn. 365.
Raii syn. av. 142.
 Le petit Morillon. *Briffon av.* VI. 411. *Tab.* 27. *fig.* 1.
- Kram.* 341.
Anas fuligula. Lin. syst. 207.
Wigge. Faun. Suec. sp. 132.
Norvegis Trol-And. Brunnich,
 90.
 Reiger-Ente, Straufs - Ente.
Frisch, II. 171.
Br. Zool. 153. *Scopoli, No.* 78.

274. TUFTED

THIS scarcely weighs two pounds: the length is fifteen inches and a half: the bill is broad, of a bluish grey, the hook black: the *irides* of a fine yellow. The head is adorned with a thick, but short pendent crest. The belly, and under coverts of the wings are of a pure white: the quill feathers dusky on their exterior sides and ends; part of their interior webs white; the secondaries white tipped with black. The rest of the plumage is black, varied about the head with purple: the tail is very short, and consists of fourteen feathers: the legs of a bluish grey; the webs black. The female wants the crest.

When young, this sex is of a deep brown; and the sides of the head next the bill of a pale yellow:

DESCRIP.

low : but it preserves the other marks of the old duck. In this state it has been described in the *Ornith. boreal.* 91, under the title of *anas latirostra*.

275. SCAUP. Bollenten. *Gefner av.* 120. *fon av.* VI. 416.
 Scaup Duck. *Wil. orn.* 365. *Danis Polsk Edelmand. Brun-*
Raii syn av. 142. *nich,* 50, 51.
 Anas marila. *Lin. syst.* 196. *Schwartze wilde Ente. Frisch,*
Faun. Suec. sp. 111. *II.* 193.
 Le petit Morillon rayé. *Brif-* *Br. Zool.* 153. *add. plates.*

DESCRIF.

THIS we described from some stuffed skins very well preserved *. It seemed less than the common duck. The bill was broad, flat, and of a greyish blue color : the head and neck black glossed with green : the breast black : the back, the coverts of the wings, and the scapulars finely marked with numerous narrow transverse bars of black and grey : the greater quill feathers are dusky : the lesser white, tipped with black : the belly is white : the tail and feathers, both above and below, are black ; the thighs barred with dusky and white strokes : the legs dusky.

Mr. *Willughby* acquaints us, that these birds take their name from feeding on *scaup*, or broken shell fish : they differ infinitely in colors ; so

* When this happens, we have recourse to Mr. *Willughby* for the weight and measurements, whenever he hath noted them.

that in a flock of forty or fifty there are not two alike.

- | | | |
|---------------------------------------|---|----------------|
| Clangula. <i>Gefner av.</i> 119. | Knippa, Dopping. <i>Faun. Suec.</i> 276. | GOLDEN
EYE. |
| <i>Aldr. av.</i> III. 94. | <i>sp.</i> 122. | |
| <i>Wil. orn.</i> 368. | Norvegis Ring-Oye, Hviin- | |
| <i>Raii syn. av.</i> 142. | And v. Quin-And, Lund- | |
| Le Garrot. <i>Briffon av.</i> VI. | And. <i>Incolis Christiansoe,</i> | |
| 416. <i>Tab.</i> 37. <i>fig.</i> 2. | Bruus-Kop v. Blanke-Kniv. | |
| Schwartzkopfige Enten-Tau- | <i>Br.</i> 70, 71. | |
| cher. <i>Frisch</i> , II. 183, 184. | <i>Br. Zool.</i> 154. <i>add. plates.</i> | |
| Eifs Ente. <i>Kram.</i> 341. | <i>Scopoli</i> , No. 71. | |
| Anas clangula. <i>Lin. syst.</i> 201. | | |

THIS species weighs two pounds: the length is nineteen inches; the breadth thirty-one. The bill is black, short, and broad at the base: the head is large, of a deep black glossed with green: at each corner of the mouth is a large white spot; for which reason the *Italians* call it *Quatt'occhii*, or four eyes: the *irides* are of a bright yellow: the upper part of the neck is of the same color with that of the head: the breast and whole under side of the body are white.

DESCRIP.
MALE.

The scapulars black and white: the back, tail, and the coverts on the ridge of the wings, black: the fourteen first quill feathers, and the four last are black; the seven middlemost white, as are the coverts immediately above them: the legs of an orange color,

The

FEMALE.

The head of the female* is of a deep brown, tinged with red: the neck grey: breast and belly white: coverts and scapulars dusky and ash colored: middle quill feathers white; the others, together with the tail, black: the legs dusky. These birds frequent fresh water, as well as the sea; being found on the *Sbropshire* meres during winter.

277. MORILLON. Le Morillon. *Belon*, 165. *Wil.*

orn. 368. *Raii syn. av.* 144.

Anas glaucion? *Lin. f.*

201. *Scopoli*, No. 72.

Grey headed Duck. *Br. Zool.*

Ed. 2d. II. 471.

THIS species is rather less than the last. The bill of a yellowish brown: the *irides* gold color: the head of a dusky rust color: round the upper part of the neck is a collar of white; beneath that a broader of grey. The back and coverts dusky, with a few white lines: the greater coverts dusky, with a few great spots of white: the primaries black: the secondaries white. Breast and belly white: tail dusky: the sides above the thighs black: the legs yellow.

This was bought in the *London* market. I am doubtfull of the sex. Consult *Briffon*, VI. 406. *tab.* XXXVI.

* The smaller red headed Duck. *Wil. orn.* 369. *Raii syn. av.* 143.

Mr. *Cockfield*, of *Stratford* in *Effex*, favored me with an account of two birds of this species, shot near the same time. Both agreed in colors; but one weighed twenty-six ounces, the other only nineteen.

- La Tadorne. *Belon* av. 172. *Pl. enl.* 53.
Anas maritima. *Gesner* av. Bergander *Turneri*. Chenalopex *Plinii*.
 803, 804.
Vulpanfer Tadorne. *Aldr.* av. *Danis* Brand-Gaas, Grav-Gaas. *Norvegis* Ring-Gaas, Fager-Gaas, Ur Gaas, Rodbelte. *Feroensibus* Hav-Simmer. *Islandis* Avekong. *Br.*
 III. 71, 97.
 Shieldrake, or burrough Duck.
Wil. orn. 363.
Raii syn. av. 140.
Anas tadorna. *Lin. syst.* 195.
Jugas. *Faun. Suec. sp.* 113.
 La Tadorne. *Briffon* av. VI. *Kracht-Ente.* *Frisch*, II. 166.
Br. Zool. 154.
 344. tab. 33. fig. 2.

278. SHIELD-
DRAKE.

THE male of this elegant species weighs two pounds ten ounces: the length is two feet; the breadth three and a half. The bill is of a bright red, and at the base swells into a knob, which is most conspicuous in the spring: the head and upper part of the neck is of a fine blackish green; the lower part of the neck white: the breast, and upper part of the back is surrounded with a broad band of bright orange bay: the coverts of the wings, and the middle of the back are white; the nearest scapulars black, the others white; the greater quill feathers are black; the exterior webs

DESCRIP.

webs of the next are a fine green, and those of the three succeeding orange; the coverts of the tail are white; the tail itself of the same color, and except the two outmost feathers tipped with black; the belly white, divided lengthways by a black line; the legs of a pale flesh color.

These birds inhabit the sea coasts, and breed in rabbit holes. When a person attempts to take their young, the old birds shew great address in diverting his attention from the brood; they will fly along the ground as if wounded, till the former are got into a place of security, and then return and collect them together. From this instinctive cunning, *Turner*, with good reason, imagines them to be the *chenalopex* *, or *fox-goose* of the antients: the natives of the *Orknies* to this day call them the *slygoose*, from an attribute of that quadruped. They lay fifteen or sixteen eggs, white, and of a roundish shape. In winter they collect in great flocks. Their flesh is very rank and bad.

* *Plinii, Lib. X. c. 22.*



- Les Canards et les Canes. *Belon av.* 160.
 Anas fera torquata minor. *Anas domestica.* *Gesner av.* 113, 96.
Aldr. av. III. 83, 85.
 Common wild Duck and Mallard. Common tame Duck. *Wil. orn.* 371, 380.
Raii syn. av. 145, 150.
 Le Canard domestique, le Canard sauvage. *Briffon av.* VI 308, 318.
 Einheimische ent. Stock ent. *Kram.* 341.
 Anitra, Anitra falvatica, Cifone. *Zinan.* 105, 106.
 Anas boschas. *Anas domestica.* *Lin. syst.* 205.
 Gras-and, Blanacke. *Faun. Succ. sp.* 131.
 Fera, *Norvegis* Blaachals v. Græs-And, aliis Stok-And. *Danis* Vild-And. *Brunnich,* 87.
 Domestica, *Danis* Tam-And. *ibid.* 88.
 Wilde Ente. *Frisch,* II. 158. *fæmina.* 159.
Br. Zool. 155.
 Ratza. *Scopoli,* No. 77.

279. MAL-
LARD.

THE mallard usually weighs two pounds and an half: the length is twenty-three inches; the breadth thirty-five: the bill is of a yellowish green: the head and neck are of a deep and shining green: more than half round the lower part of the neck is an incomplete circle of white: the upper part of the breast is of a purplish red; and the beginning of the back of the same color: the breast and belly of a pale grey, marked with transverse speckled lines of a dusky hue.

DESCRIP.

The scapulars white, elegantly barred with brown: the spot on the wing is of a rich purple: the tail consists of twenty-four feathers. What distinguishes the male of this species from all others are the four middle feathers, which are black and strongly

strongly curled upwards; but the females want this mark. Their plumage is of a pale reddish brown, spotted with black. The legs are of a saffron color.

The common tame species of ducks take their origin from these, and may be traced to it by unerring characters. The drakes, howsoever they vary in colors, always retain the curled feathers of the tail: and both sexes the form of the bill of the wild kind. Nature sports in the colors of all domestic animals; and for a wise and useful end; that mankind may the more readily distinguish and claim their respective property. Wild ducks pair in the spring, and breed in all marshy grounds, and lay from ten to sixteen eggs. They abound in *Lincolnshire*, the great magazine of wild fowl in this kingdom; where prodigious numbers are taken annually in the decoys.

DECOYS.

A decoy is generally made where there is a large pond surrounded with wood, and beyond that a marshy and uncultivated country: if the piece of water is not thus surrounded, it will be attended with the noise and other accidents, which may be expected to fright the wild fowl from a quiet haunt, where they mean to sleep (during the day-time) in security.

If these noises or disturbances are wilful, it hath been held, that an action will lye against the disturber.

As soon as the evening sets in, the decoy *rises*
(as

(as they term it) and the wild fowl feed during the night. If the evening is still, the noise of their wings, during their flight, is heard at a very great distance, and is a pleasing, though rather melancholy sound. This *rising* of the decoy in the evening, is in *Somersetshire* called *rodding*.

The decoy ducks are fed with hempseed, which is flung over the skreens in small quantities, to bring them forwards into the pipes, and to allure the wild fowl to follow, as this seed is so light as to float.

There are several *pipes* (as they are called) which lead up a narrow ditch, that closes at last with a funnel net. Over these pipes (which grow narrower from the first entrance) is a continued arch of netting, suspended on hoops. It is necessary to have a pipe or ditch for almost every wind that can blow, as upon this circumstance it depends which pipe the wild fowl will take to; and the decoy-man always keeps on the leeward side of the ducks, to prevent his effluvia reaching their sagacious nostrils. All along each pipe, at certain intervals, are placed skreens made of reeds, which are so situated, that it is impossible the wild fowl should see the decoy-man, before they have passed on towards the end of the pipe, where the purse-net is placed. The inducement to the wild fowl to go up one of these pipes is, because the decoy-ducks, trained to this, lead the way, either after hearing the whistle of the decoy-man, or enticed
by

by the hempseed; the latter will dive under water, whilst the wild fowl fly on, and are taken in the purse.

It often happens, however, that the wild fowl are in such a state of sleepiness and dozing, that they will not follow the decoy-ducks. Use is then generally made of a dog, who is taught his lesson: he passes backwards and forwards between the reed skreens (in which are little holes, both for the decoy-man to see, and for the little dog to pass through) this attracts the eye of the wild fowl, who not chusing to be interrupted, advance towards this small and contemptible animal, that they may drive him away. The dog, all this time, by direction of the decoy-man, plays among the skreens of reeds, nearer and nearer to the purse-net; till at last, perhaps, the decoy-man appears behind a skreen, and the wild fowl not daring to pass by him in return, nor being able to escape upwards on account of the net-covering, rush on into the purse-net. Sometimes the dog will not attract their attention, if a red handkerchief, or something very singular, is not put about him.

The general season for catching fowl in decoys, is from the latter end of *October* till *February*; the taking of them earlier is prohibited by an act 10. *George II. c. 32.* which forbids it from *June 1,* to *October 1,* under the penalty of five shillings for each bird destroyed within that space.

The *Lincolnshire* decoys are commonly set at a certain

certain annual rent, from five pounds to twenty pounds a year: and we have heard of one in *Somersetshire* that pays thirty. The former contribute principally to supply the markets of *London*. Amazing numbers of ducks, wigeons, and teal are taken: by an account sent us of the number caught, a few winters past, in one season, and in only ten decoys, in the neighborhood of *Wainfleet*, it appeared to amount to thirty-one thousand two hundred, in which is included several other species of ducks; it is also to be observed, that in the above particular, wigeon and teal are reckoned but as one, and consequently sell but at half the price of the ducks. This quantity makes them so cheap on the spot, that we have been assured several decoy-men would be glad to contract for years to deliver their ducks at *Boston* for ten-pence the couple. The account of the numbers here mentioned, relates only to those that were sent to the *Capital*.

It was customary formerly to have in the fens an annual *driving* of the young ducks before they took wing. Numbers of people assembled, who beat a vast tract, and forced the birds into a net placed at the spot where the sport was to terminate. A hundred and fifty dozens have been taken at once: but this practice being supposed to be detrimental, has been abolished by act of parliament.

280. SHOVEL-ER. *Anas latirostra* (ein Breit-schnabel.) *Gesner av.* 120.
Aldr. av. III. 94.
Wil. orn. 370.
Raii syn. av. 143.
Phasianus marinus. *Charlton ex.* 105.
 Blue-wing Shoveler (*fam.*)
Cat. Carol. I. 96.
Le Souchet. Brisson av. VI. 329. *Tab.* 32. *fig.* 1.
Schaufl-ente, Löffl-ente. Kram. 342.
Anas clypeata. *Lin. syst.* 200.
Faun. Suec. sp. 119.
Kertlutock. Krantz's Greenl.* I. 80.
Danis Krop-And, Norvegis Stok-And. Cimbris Leffel-And. Brunnich, 67. 68.
Schild-Ente, Loeffel-Ente. Frisch, II. 161, 162. *fam.* 163.
Br. Zool. 155. *Scopoli,* No. 70.

DESCRIP.

THIS weighs twenty-two ounces: its length twenty-one inches. The bill is black, three inches long, spreads near the end to a great breadth, is furnished with a small hook, and the edges of each mandible are pectinated, or supplied with thin laminae, that lock into each other when the mouth is closed. The irides are of a bright yellow: the head and upper part of the neck of a blackish green: the lower part of the neck, the breast, and the scapulars are white: the back brown: the coverts of the wings of a fine sky blue; those next the quill feathers tipped with white: the greater quill feathers are dusky; the exterior webs of those in the middle, are of a glossy green. The tail consists of fourteen feathers; the outmost are white;

* *i. e.* Broad bill.

those in the middle black, edged with white: the belly is of a bay color: the vent feathers black: the legs red. The female has the same marks in the wings as the male, but the colors are less bright: the rest of the plumage resembles that of the common wild duck.

WE are indebted to Mr. *Bolton* for the description of this bird, who informed us that it was sometimes taken in the decoys in *Lincolnshire*.

281. RED
BREASTED
SHOVELER.

DESCRIP.

It is the size of a common duck. The bill large, broad, ferrated at the sides, and entirely of a brownish yellow color: the head large: eyes small: irides yellow: the breast and throat of a reddish brown, the latter paler, but both quite free from any spots. The back is brown, growing paler towards the sides. The tips and pinions of the wings grey: the quill-feathers brown; the rest of a greyish brown: the *speculum* or spot purple, edged with white: in the female, the spot is blue, and all the other colors are fainter. The tail is short and white: the vent feathers of a bright brown, spotted with darker: the legs short and slender: the feet small, of a reddish brown color.

282. PIN-
TAIL.

Anas caudacuta (ein spitz-
schwanz) *Gesner av.* 121.
Aldr. av. III. 97.
Sea Pheasant, or Cracker.
Wil. orn. 376.
Le Canard a longue queue.
Briffon av. VI. 369. *tab.* 34.
Schwalbenscheif. *Kram.* 340.

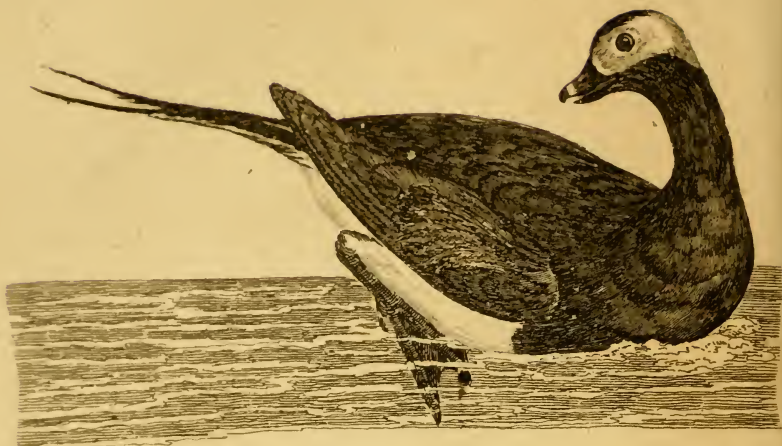
Raii syn. av. 147.
Anas acuta. *Lin. syst.* 202.
Aler, Ahlvogel. *Faun. Suec.*
sp. 126.
Fasan-Ente. *Frisch,* II. 160.
Brunnich in append.
Aglek. *Crantz's Greenl.* I. 80.
Br. Zool. 156. *Scopoli,* No. 73.

DESCRIF.

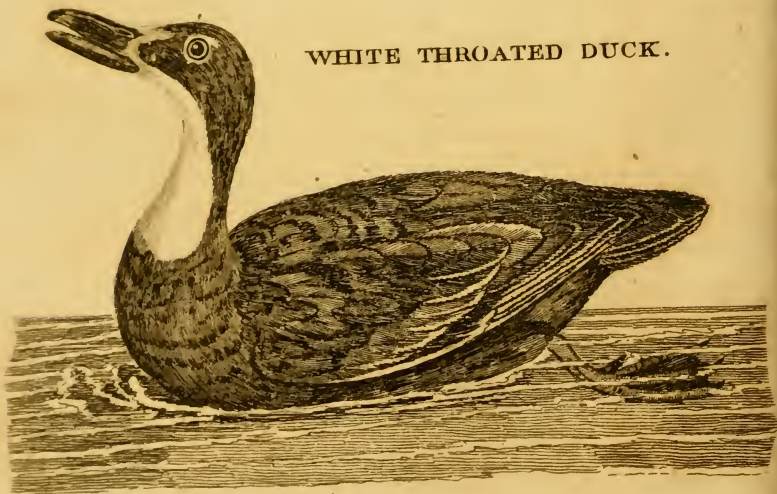
THE form of this species is slender, and the neck long: its weight twenty-four ounces: its length twenty-eight inches; its breadth one yard two inches. The bill is black in the middle, blue on the sides: the head is ferruginous, tinged behind the ears with purple; from beneath the ears commences a white line, which runs some way down the neck; this line is bounded by black: the hind part of the neck, the back, and sides are elegantly marked with white and dusky waved lines: the fore part of the neck, and belly are white.

The scapulars striped with black and white: the coverts of the wings ash colored; the lowest tipt with dull orange: the middle quill-feathers barred on their outmost webs with green, black and white: the exterior feathers of the tail are ash colored: the two middle black, and three inches longer than the others: the feet of a lead color. The female is of a light brown color, spotted with black. Mr. *Hartlib*, in the appendix to his *Lega-*

LONG TAILED DUCK.



WHITE THROATED DUCK.



cy, tells us that these birds are found in great abundance in *Connaught* in *Ireland*, in the month of *February* only; and that they are much esteemed for their delicacy.

Wil. orn. 364.

Raii syn av. 145.

Long tailed Duck. *Edw. av.* 280.

Le Canard a longue queue d'Islande. *Briffon av.* VI. 379.

Anas glacialis. Lin. syst. 203.

Norvegis Ungle, Angeltaske

v. Troefoerer. *Feroenfibus*

Oedel. *Islandis* Ha-Ella v.

Ha-Old. *Incolis Christiansoe*

Gadissen, Klaeshahn Dyk-

ker. *Brunnich*, 75, 76.

Br. Zool. 156. *Scopoli*, No.

74.

283. LONG
TAILED.

THIS is inferior in size to the former. The bill is short, black at the tip and base, orange colored in the middle; the cheeks are of a pale brown: the hind part of the head, and the neck both before and behind are white; the sides of the upper part of the neck are marked with a large dusky bar, pointing downwards; the breast and back are of a deep chocolate color; the scapulars are white, long, narrow, and sharp pointed. The coverts of the wings, and greater quill feathers dusky; the lesser of a reddish brown: the belly white: the four middle feathers of the tail are black; and two of them near four inches longer than the others, which are white: the legs dusky. These birds breed in the most northern parts of the world, and only visit our coasts in the severest winters.

DESCRIF.

284. POCHARD. La Cane a teste rousse. *Belon* *Anas ferina. Lin. syst.* 203.
av. 173. *Faun. Suec. sp.* 127.
Anas fera fusca, vel media *Penelope, le Millouin. Brisson*
(ein wilte grauwe ente, *av.* VI. 384. *tab.* 35. *fig.* 1.
Rotent.) Gesner av. 116. *Danis Brun-Nakke. Norve-*
Aldr. av. III. 93. *gis Rod-Nakke. Brunnich,*
Poker, Pochard, or red head- 80.
ed Wigeon. Wil. orn. 367. *Br. Zool.* 156.
Raii syn. av. 143.

DESCRIP. ITS weight is about one pound twelve ounces : its length nineteen inches ; its breadth two feet and a half. The bill is of a deep lead color : the head and neck are of a bright bay color : the breast and part of the back where it joins the neck, are black : the coverts of the wings, the scapulars, back and sides under the wings are of a pale grey, elegantly marked with narrow lines of black : the quill feathers dusky : the belly ash colored and brown : the tail consists of twelve short feathers, of a deep grey color : the legs lead colored : the irides of a bright yellow, tinged with red.

FEMALE. The head of the female is of a pale reddish brown : the breast is rather of a deeper color : the coverts of the wings a plain ash color : the back marked like that of the male : the belly ash colored. These birds frequent fresh water as well as the sea ; and being very delicate eating, are much sought for in the *London* markets, where they are known by the name of *Dun birds*.

Anas





Anas rufa rostro pedibusque cinereis. *Faun. Suec. sp.* 47. 285. FERRUGINOUS.

THE description of this species was sent to us by Mr. *Bolton*. The weight was twenty ounces: the bill is long and flatted, rounded a little at the base, ferrated along the edges of each mandible, and furnished with a nail at the end of the upper. The color a pale blue. The head, neck, and whole upper part of the bird is of an agreeable reddish brown: the throat, breast and belly of the same color, but paler: the legs of a pale blue; but the webs of the feet black.

This species, he informed us, was killed in *Lincolnshire*. We do not find it mentioned by any writer, except *Linnaeus*, who took his description from *Rudbeck's* paintings; and adds, that it is found, though rarely, in the *Swedish* rivers.

<i>Anas fistularis</i> (ein Pfeifente)	<i>Anas fistularis</i> , le Canard fist-	286. WIGEON
<i>Gesner av.</i> 121.	fleur. <i>Briffon av.</i> VI. 391.	
<i>Penelope. Aldr. av.</i> III. 92.	<i>tab.</i> 35. <i>fig.</i> 2.	
Wigeon, or Whewer. <i>Wil.</i>	Eissent mit weisser platten.	
<i>orn.</i> 375.	<i>Kram.</i> 342.	
<i>Raii syn. av.</i> 146.	<i>Danis Bles-And. Brunnich,</i>	
<i>Anas penelops. Lin. syst.</i>	72.	
202.	<i>Br. Zool.</i> 157. <i>add. plates.</i>	
<i>Wriand. Faun. Suec. sp.</i> 124.		

THE wigeon weighs near twenty-three ounces: the length is twenty inches; the breadth

R r 4

two

two feet three. The bill is lead colored; the end of it black; the head, and upper part of the neck is of a bright light bay; the forehead paler, in some almost white: the plumage of the back, and sides under the wings are elegantly marked with narrow, black and white undulated lines: the breast is of a purplish hue, which sometimes though rarely is marked with round black spots: the belly white: the vent feathers black. In some birds the coverts of the wings are almost wholly white; in others of a pale brown, edged with white: the greater quill feathers are dusky; the outmost webs of the middle feathers of a fine green, the tips black; the last are elegantly striped with black and white. The two middle feathers of the tail are longer than the others, black and sharp pointed; the rest ash colored: the legs dusky. The head of the female is of a rusty brown, spotted with black; the back is of a deep brown, edged with a paler: the tips of the lesser quill feathers white: the belly white.

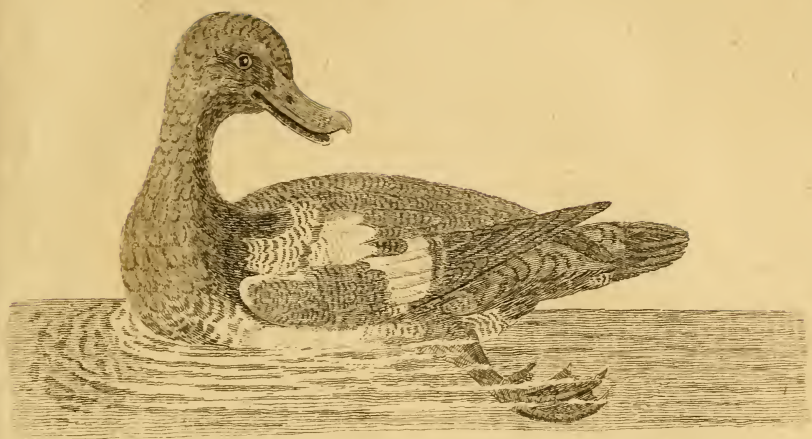
FEMALE.

287. BIMACULATED.

THE length is twenty inches; extent twenty-five and a half. Bill a deep lead color: nail black.

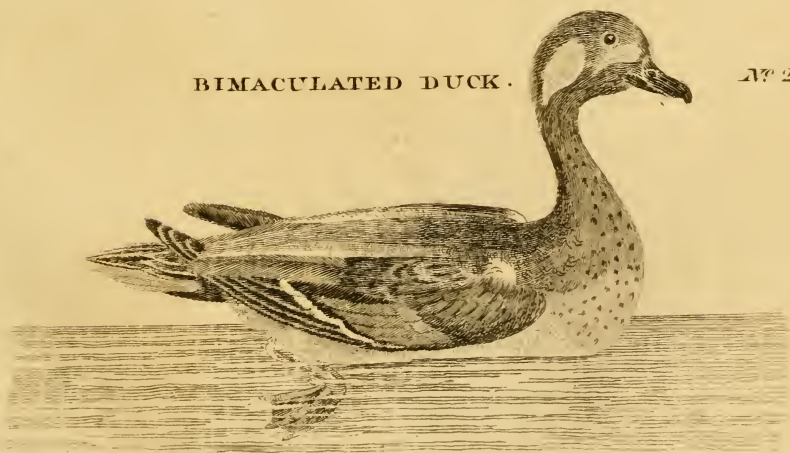
Crown, brown changeable with green, ending in a streak of brown at the hind part of the head, with a small crest. Between the bill and the eye, and

SCAUP DUCK.



BIMACULATED DUCK.

Nº 287.





and behind each ear, a ferruginous spot. The first round: the last oblong and large. Throat of a fine deep purple. The rest of the head of a bright green, continued in streaks down the neck. Breast a light ferruginous brown, spotted with black: hind part of the neck, and back, dark brown waved with black.

Coverts of the wings ash colored: lower coverts streaked with rust color: scapulars cinereous: quill feathers brownish cinereous. Secondaries of a fine green, ending in a shade of black, and edged with white.

Coverts of the tail a deep changeable green. Twelve feathers in the tail: two middlemost black; the others brown edged with white. Belly dusky, finely granulated. Legs small, and yellow. Webs dusky.

Taken in a decoy near
Communicated to me by

in 1771.
Poore, Esq.

Anas strepera (cin Leiner).

Gesner av. 121.

Aldr. av. III. 97.

Gadwall, or Gray. *Wil. orn.*

374.

Raii syn. av. 145.

Le Chipeau. *Briffon av.* VI.

339. *tab.* 33. *fig.* 1.

Anas strepera. *Lin. syst.* 200.

Faun. Suec. sp. 121.

Cimbris Knarre-Gaas. *Brun-*

nich, 91.

Br. Zool. 157.

Grave mittel-ente. *Frisch,*

II. 168.

288. GAD-
WALL.

THIS species is rather inferior in size to the wigeon. The bill is two inches long, black, and

DESCRIP.

and flat; the head, and upper part of the neck, are of a reddish brown, spotted with black; the lower part, the breast, the upper part of the back, and the scapulars, are beautifully marked with black and white lines; the belly is of a dirty white; the rump above and below is black; the tail ash colored, edged with white; the coverts on the ridge of the wing are of a pale reddish brown; those beneath are of purplish red, the lowest of a deep black: the greater quill-feathers are dusky: the inner web of three of the lesser quill-feathers are white; which forms a conspicuous spot; the legs are orange colored. The breast of the female is of a reddish brown, spotted with black: the back of the same color; and though it has the same marks on the wings, they are far inferior in brightness to those of the male.

289. GARGA-
NEY. La Sarcelle. *Belon av.* 175. Krickantl. *Kram.* 343.
Querquedula varia. *Gesner* Anas Querquedula. *Lin. syst.*
av. 107. 203.
Scavolo, Cercevollo, Garga-*Faun. Succ. sp.* 128.
nello. *Aldr. av.* III. 89, 90. Kriech-Ente. *Frisch*, II. 176.
Wil. orn. 377. *Norvegis* Krek-And. *Quibusd.*
Querquedula prima Aldr. Saur-And. *Brunnich*, 81.
Raii syn. av. 148*. *Br. Zool.* 158. *Scopoli*, No.
La Sarcelle. *Brissou av.* VI. 75.
427. *tab.* 39.

DESCRIP.

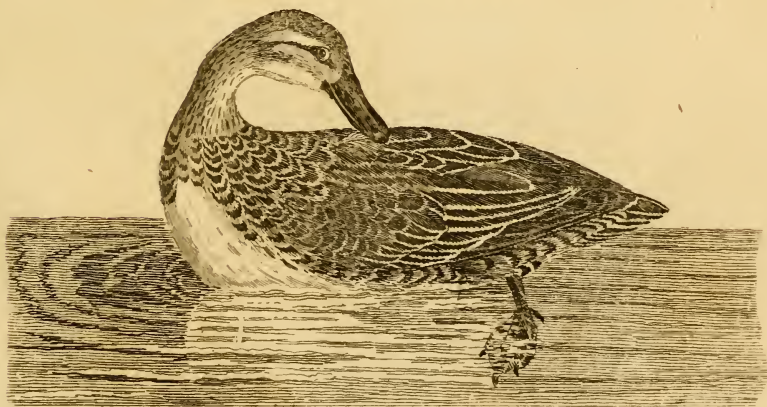
THE length of this species is seventeen inches; the extent twenty-eight. The bill is of

* Mr. Ray, in his *syn. av.* 147. describes a duck under the name of *Phasas*; in *Yorkshire* it is called the widgeon: he says,

GARGANEY.



FEMALE GARGANEY.



of a deep lead color; the crown of the head is dusky, marked with oblong streaks; on the chin is a large black spot; from the corner of each eye is a long white line, that points to the back of the neck: the cheeks, the upper part of the neck, are of a pale purple, marked with minute oblong lines of white, pointing downwards; the breast is of a light brown, marked with semicircular bars of black: the belly is white; the lower part and vent varied with specks, the bars of a dusky hue; the coverts of the wings are grey; but the lowest are tipped with white; the first quill-feathers are ash colored; the exterior webs of those in the middle green; the scapulars are long and narrow, and elegantly striped with white, ash color, and black; the tail dusky: the legs lead color.

The female has an obscure white mark over the eye; the rest of the plumage is of a brownish ash color, not unlike the hen teal, but the wing wants the green spot, which sufficiently distinguishes these birds.

FEMALE.

In many places these birds are called the *Summer Teal*.

says, the head and neck are brown, spotted with triangular black marks: the body, wings, and tail dusky, edged with a paler color: in the wings is a double line of white: belly white: bill and legs blue. We suspect it to be a young bird of this species, but wait for further information before we can determine it.

Querquedula.

290. TEAL. *Querquedula. Gesner av.* 106. *Anas Cref a. Lin. syst.* 204.
Garganei. Aldr. av. III. 90. *Arta, Kræcka. Faun. Suec.*
Wil. orn. 377. *sp.* 129.
Raii syn. av. 147. *Cimbris Atteling-And. Nor-*
La petite Sarcelle. Briffon av. *vegis Hestelort-And. Danis*
VI. 436. tab. 40. fig. 1. *Communiter Krik-And.*
Rothantl, Pfeiffantl. Kram. *Brunnich, 82, 83*
343. *Br. Zool. 158. add. plates.*
Spiegel-Entlein. Frisch, II.
174.

DESCRIP.

THE Teal weighs about twelve ounces: the length is fourteen inches; the breadth twenty-three: the weight of a drake twelve ounces; of a duck nine: the bill black: the head, and upper part of the neck are of a deep bay: from the bill to the hind part of the head is a broad bar of glossy changeable green; bounded on the lower side by a narrow white line: the lower part of the neck, the beginning of the back, and the sides under the wings, are elegantly marked with waved lines of black and white.

The breast and belly are of a dirty white; the first beautifully spotted with black: the vent black: the tail sharp pointed, and dusky: the coverts of the wings brown: the greater quill-feathers dusky; the exterior webs of the lesser marked with a glossy green spot; above that another of black, and the tips white: the irides whitish; the legs dusky. The female is of a brownish ash color, spotted with

with black; and has a green spot on the wing like the male.

By the description Mr. *Willughby* has left of the *Summer Teal*, p. 378. we suspect that it differs not in the species from the common kind, only in sex. *Linnaeus* hath placed it among the birds of his country*; but leaves a blank in the place of its residence; and hath evidently copied Mr. *Willughby*'s imperfect description of it: and to confirm our suspicion that he has followed the error of our countryman; we observed that a bird sent us from the *Baltic* sea, under the title of *anas circica*, the *Summer Teal* of *Linnaeus*, was no other than the female of our teal.

SUMMER
TEAL.

* *Fauna Suecica*, sp. 130.

XLVIII.
CORVO-
RANT*.

BILL strong, strait; end either hooked or sloping.
NOSTRILS, either totally wanting, or small, and placed in a longitudinal furrow.
FACE naked.
GULLET naked, capable of great distension.
TOES, all four webbed.

291. CORVO-
RANT.

Mergus Plinii lib. x. c. 33. *N. Com. Petr.* IV. 423.
Le Cormorant. *Belon av.* 161. Le Cormoran. *Briffon av.*
Corvus aquaticus, Carbo a- VI. 511. tab. 45. *The*
quaticus. 136. *Male.*
Phalacrocorax. Gefner av. *Norvegis* Skarv, Strand-Ravn.
683. 350. *Danis* Aalekrage. *Islandis*
Aldr. av. III. 108. Skarfur. *Brunnich,* 120,
The Cormorant. *Wil. orn.* 121.
329. Scharb, or See-Rabe. *Frisch,*
Raii syn. av. 122. II. 187.
Pelecanus Carbo. Lin. syst. *Br. Zool.* 159. *Scopoli,* No.
216. 98.

DESCRIP.

I HAVE weighed a bird of this species that exceeded seven pounds: the length three feet four: the extent four feet two: the bill dusky, five inches long, destitute of nostrils; the base of the lower mandible is covered with a naked yellowish skin, that extends under the chin, and forms a sort of pouch: a loose skin of the same color

* The learned Dr. *Kay*, or *Caius*, derives the word *Corvorant*, from *Corvus vorans*, from whence corruptly our word *Cormorant*. *Caii opusc.* 99.

reaches from the upper mandible round the eyes, and angles of the mouth: the head and neck are of a footy blackness; but under the chin of the male the feathers are white: and the head in that sex is adorned with a short loose pendent crest; in some the crest and hind part of the head are streaked with white. The coverts of the wings, the scapulars, and the back, are of a deep green, edged with black, and glossed with blue: the quill-feathers and tail dusky: the last consists of fourteen feathers: the breast and belly black: in the midst of the last is often a bed of white: on the thighs of the male is a tuft of white feathers: the legs are short, strong, and black; the middle claw ferrated on the inside: the irides are of a light ash color.

These birds occupy the highest parts of the cliffs that impend over the sea: they make their nests of sticks, sea tang, grass, &c. and lay six or seven white eggs of an oblong form. In winter they disperse along the shores, and visit the fresh waters, where they make great havoc among the fish. They are remarkably voracious, having a most sudden digestion, promoted by the infinite quantity of small worms that fill their intestines. The corvorant has the rankest and most disagreeable smell of any bird, even when alive. Its form is disagreeable; its voice hoarse and croaking, and its qualities base. No wonder then that *Milton* should make *Satan* personate this bird, to survey
undelighted

NEST.

EGGS.

undelighted the beauties of Paradise: and *fit deviling death* on the tree of life *.

These birds have been trained to fish like falcons to fowl. *Whitelock* tells us, that he had a cast of them *manned* like hawks, and which would come to hand. He took much pleasure in them, and relates, that the best he had was one presented him by Mr. WOOD, *Master of the Corvorants* to CHARLES I. It is well known that the *Chinese* make great use of these birds, or a congenerous sort, in fishing; and that not for amusement, but profit †.

292. SHAG. *Corvus aquaticus minor.* *Aldr.* *Le petit Cormoran.* *Briffon*
av. III. 109. *av.* VI. 516.
 The Shag, called in the *Pelecanus graculus.* *Lin. syst.*
 North of England the Crane. 217.
Wil. orn. 330. *Phalacrocorax cristatus.* *Nor-*
vegis Top Skarv. *Brunnich*
Corvus aquaticus minor. *ornith.* 123.
Graculus palmipes dictus. *Br. Zool.* 159.
Raii syn. av. 123.

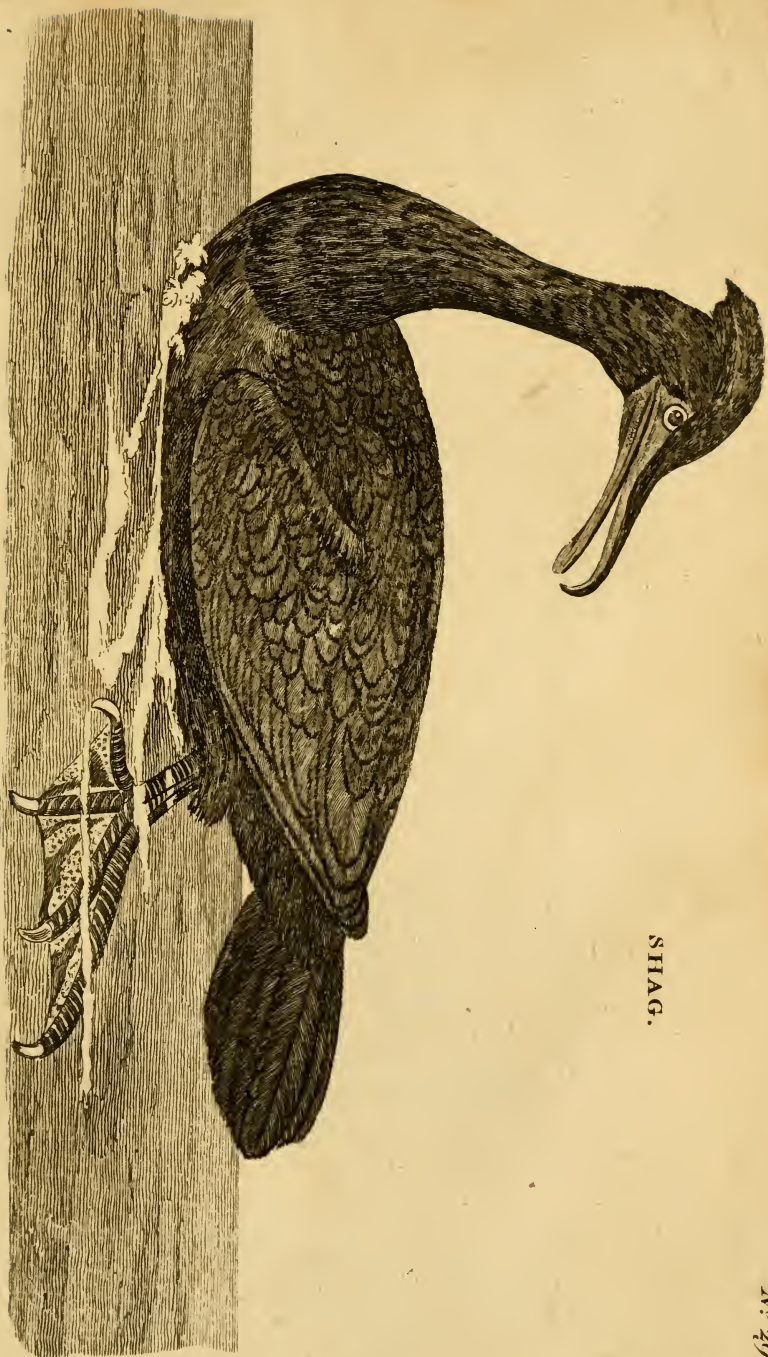
DESCRIP.

THE shag is much inferior in size to the corvo-
 rant: the length is twenty-seven inches; the
 breadth three feet six: the weight three pounds
 three quarters. The bill is four inches long, and
 more slender than that of the preceding: the head
 is adorned with a crest two inches long, pointing

* *Paradise Lost*, Book IV. l. 194, &c.

† *Dubalde* I. 316.

SHAG.



backward: the whole plumage of the upper part of this bird is of a fine and very shining green, the edges of the feathers a purplish black; but the lower part of the back, the head, and neck, wholly green: the belly is dusky: the tail consists of only twelve feathers, of a dusky hue, tinged with green; the legs are black, and like those of the corvorant. During my voyage among the *Hebrides*, I saw several birds of this species shot: they agreed in all respects, but in being destitute of a crest; whether they were females, a variety, or distinct species, must be left to future naturalists to determine.

Both these kinds agree in their manners, and breed in the same places: and, what is very strange in webbed footed birds, will perch and build in trees: both swim with their head quite erect, and are very difficult to be shot; for, like the *Grebes* and *Divers*, as soon as they see the flash of the gun, pop under water, and never rise but at a considerable distance.

We are indebted for this bird to the late Mr. *William Morris* of *Holyhead*, with whom we had a constant correspondence for several years, receiving from that worthy man and intelligent naturalist, regular and faithful accounts of the various animals frequenting that vast promontory.

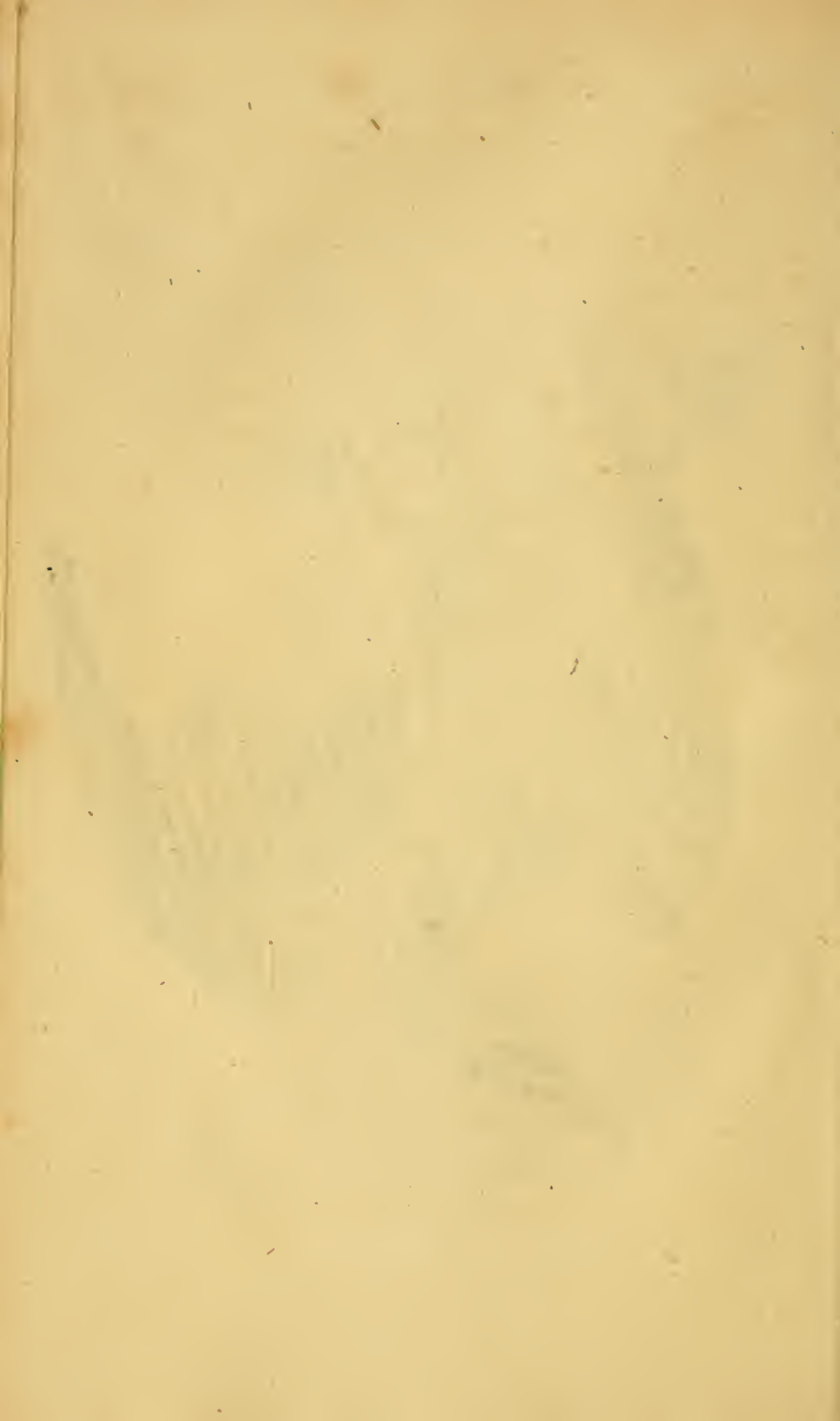
293. GAN-
NET.
- Anser Bassanus* five *Scoticus*.
Gesner av. 163.
Aldr. av. 68.
Sula. Hoieri Clus. ex. 367.
Hedlor Boeth. 6.
Soland Goose. Wil. orn. 328.
Raii syn. av. 122.
Itin. 191. 269. 279.
Sibb. hist. Scot. 20. *tab.* 9.
Sibb. hist. Fife. 45. 47.
Jaen van Gent. Martin's Spitz-
berg. 97.
- Solan Goose. Martin's voy.*
St. Kilda. 27.
Descript. West. Isles. 281.
Macaulay's hist. St. Kilda. 133.
Sula Bassana, le Fou de Bas-
fan. Briffon av. VI. 503.
tab. 44.
Pelecanus Bassianus. Lin. syst.
217.
Nor-vegis Sule, Hav-Sul. Brun-
nich, 124.
Br. Zool. 160.

DESCRIP.

THIS species weighs seven pounds: the length is three feet one inch; the breadth six feet two inches. The bill is six inches long, strait almost to the point, where it inclines down; and the sides are irregularly jagged, that it may hold its prey with more security: about an inch from the base of the upper mandible is a sharp process pointing forward; it has no nostrils; but in their place a long furrow, that reaches almost to the end of the bill: the whole is of a dirty white, tinged with ash color. The tongue is very small, and placed low in the mouth: a naked skin of a fine blue furrounds the eyes, which are of a pale yellow, and are full of vivacity: this bird is remarkable for the quickness of its sight: *Martin* tells us that *Solan* is derived from an *Irish* word expressive of that quality.

From





From the corner of the mouth is a narrow slip of black bare skin, that extends to the hind part of the head: beneath the chin is another, that like the pouch of the *Pelecan*, is dilatable, and of size sufficient to contain five or six entire herrings; which, in the breeding season, it carries at once to its mate or young.

The neck is very long: the body flat, and very full of feathers: the crown of the head, and a small space on the hind part of the neck is buff colored: the rest of the plumage is white: the bastard wing and greater quill-feather excepted, which are black; the legs and toes are black; but the fore part of both are marked with a stripe of fine pea green. The tail consists of twelve sharp pointed feathers, the middle of which is the longest.

The young birds, during the first year, differ greatly in color from the old ones; being of a dusky hue, speckled with numerous triangular white spots; and at that time resemble in colors the *speckled Diver*. Each bird, if left undisturbed, would only lay one egg in the year; but if that be taken away, they will lay another; if that is also taken, then a third; but never more that season. A wise provision of nature, to prevent the extinction of the species by accidents, and to supply food for the inhabitants of the places where they breed; their egg is white, and rather less than that of the common goose: the nest is large, and formed of any thing the bird finds floating on the

Y O U N G.

E G G.

N E S T.

water, such as grafs, fea plants, fhavings, &c. Thefe birds frequent the *Isle of Ailsa*, in the *Firth of Clyde*; the rocks adjacent to *St. Kilda*, the *Stack of Soulskery*, near the *Orkneys*; the *Skelig Isles*, off the coasts of *Kerry, Ireland**, and the *Bafs Isle*, in the *Firth of Edinburgh*: the multitudes that inhabit thefe places are prodigious. Dr. *Harvey's* elegant account of the latter, will ferve to give fome idea of the numbers of thefe, and of the other birds that annually migrate to that little fpot.

“ *There is a fmall ifland, called by the Scotch,*
 “ *Bafs Ifland, not more than a mile in circumfe-*
 “ *rence; the furface is almoft wholly covered du-*
 “ *ring the months of May and June with nefts, eggs,*
 “ *and young birds; fo that it is fcarcely poffible to*
 “ *walk without treading on them: and the flocks of*
 “ *birds in flight are fo prodigious, as to darken the*
 “ *air like clouds; and their noife is fuch, that you can-*
 “ *not, without difficulty, hear your next neighbour's*
 “ *voice. If you look down upon the fea, from the*
 “ *top of the precipice, you will fee it on every fide*
 “ *covered with infinite numbers of birds of different*
 “ *kinds, fwimming and hunting for their prey: if in*
 “ *failing round the ifland you furvey the hanging cliffs,*
 “ *you may fee in every cragg or fiffure of the broken*

* This information we owe to that worthy prelate, the late Dr. *Pocock*, Bifhop of *Meath*; who had vifited the *Skeligs*. Mr. *Smith*, in his hiftories of *Cork* and *Kerry*, confounds this bird with the Gull defcribed by Mr. *Willughby*; from whom he has evidently borrowed the whole defcription.

“ *rocks,*

“ rocks, innumerable birds of various sorts and sizes,
 “ more than the stars of heaven when viewed in a
 “ serene night: if from afar you see the distant
 “ flocks, either flying to or from the island, you would
 “ imagine them to be a vast swarm of bees*.”

Nor do the rocks of *St. Kilda* seem to be less frequented by these birds; for *Martin* assures us, that the inhabitants of that small island consume annually no less than 22,600 young birds of this species, besides an amazing quantity of their eggs; these being their principal support throughout the year; they preserve both eggs and fowls in small pyramidal stone buildings, covering them with turf ashes, to preserve them from moisture. This is a dear bought food, earned at the hazard of their lives, either by climbing the most difficult and

* *Est insula parva, Scoti Basse nominant, haud amplius mille passuum circuitu amplitudo ejus clauditur. Hujus insulæ superficies, mensibus Maio & Junio nidis ovis pullisque propemodum tota instrata est, adeo ut vix, præ eorum copia pedem liberè ponere liceat: tantaque super-volantium turba, ut nubium instar, solem cælumque auferant: tantusque vociferantium clangor & strepitus, ut propè alloquentes vix audias. Si subjectum mare inde, tanquam ex edita turri & altissimo præcipitio despexeris, idem quoque versum, infinitis diversorum generum avibus natantibus prædæque inbiantibus, opertum videas. Si circumnavigando imminentem clivum suspicere libuerit; videas in singulis prærupti loci crepidinibus & recessibus, avium cujuslibet generis & magnitudinis, ordines innumerabiles, plures sanè quam nocte, sereno cælo, stellæ conspiciuntur. Si advolantes avolanteque eminè adspexeris, apum profecto ingens examen credas. De generat. Animal. Exercit. 11.*

narrow paths, where (to appearance) they can barely cling, and that too, at an amazing height over the raging sea: or else being lowered down from above, they collect their annual provision, thus hanging in midway air; placing their whole dependance on the uncertain footing of one person who holds the rope, by which they are suspended at the top of the precipice. The young birds are a favorite dish with the *North Britons* in general: during the season they are constantly brought from the *Bass Isle* to *Edinburgh*, sold at 20d. a piece, are roasted, and served up a little before dinner as a whet.

The *Gannets* are birds of passage. Their first appearance in those islands is in *March*; their continuance there till *August* or *September*, according as the inhabitants take or leave their first egg; but in general, the time of breeding, and that of their departure, seems to coincide with the arrival of the herring, and the migration of that fish (which is their principal food) out of those seas. It is probable that these birds attend the herring and pilchard during their whole circuit round the *British* islands; the appearance of the former being always esteemed by the fishermen as a sure presage of the approach of the latter. It migrates in quest of food as far south as the mouth of the *Tagus*, being frequently seen off *Lisbon* during the month of *December*, plunging for *Sardinæ*, fish resembling, if not the same with our *Pilchard*.

I have

I have in the month of *August* observed in *Catbnefs* their northern migrations: I have seen them passing the whole day in flocks, from five to fifteen in each: in calm weather they fly high; in storms they fly low and near the shore; but never cross over the land, even when a bay with promontories intervenes, but follow, at an equal distance, the course of the bay, and regularly double every cape. I have seen many of the parties make a sort of halt for the sake of fishing: they soared to a vast height, then darting headlong into the sea, made the water foam and spring up with the violence of their descent; after which they pursued their route. I enquired whether they ever were observed to return southward in the spring, but was answered in the negative; so it appears that they annually encircle the whole island.

They are well known on most of our coasts but not by the name of the *Soland-Goose*. In *Cornwal* and in *Ireland* they are called *Gannets*; by the *Welsh* *Gan*. The excellent Mr. Ray supposed the *Cornish Gannet* to be a species of large Gull; a very excusable mistake, for during his six months residence in *Cornwal*, he never had an opportunity of seeing that bird, except flying; and in the air it has the appearance of a gull. On that supposition he gave our *Skua*, p. 417. the title of *Catarafta*, a name borrowed from *Aristotle**, and which admirably expresses the rapid descent of this bird on

NAME.

* Page 1045.

its prey. Mr. *Moyle* first detected this mistake*; and the Rev. Doctor *William Borlase*, by presenting us with a fine specimen of this bird, confirms the opinion of Mr. *Moyle*; at the same time he favored us with so accurate an account of some part of the natural history of this bird, that we shall use the liberty he indulged us with, of adding it to this description.

“ The *Gannet* comes on the coasts of *Cornwal*
 “ in the latter end of summer, or beginning of au-
 “ tumn; hovering over the shoals of pilchards that
 “ come down to us through *St. George’s Channel*
 “ from the northern seas. The *Gannet* seldom
 “ comes near the land, but is constant to its prey,
 “ a sure sign to the fishermen that the pilchards are
 “ on the coasts; and when the pilchards retire, ge-
 “ nerally about the end of *November*, the *Gannets*
 “ are seen no more. The bird now sent was killed
 “ at *Chandour*, near *Mountsbay*, *Sept.* 30, 1762, af-
 “ ter a long struggle with a water spaniel, assisted
 “ by the boatmen; for it was strong and pugna-
 “ cious. The person who took it observed that it
 “ had a transparent membrane under the eye-lid,
 “ with which it covered at pleasure the whole eye,
 “ without obscuring the sight or shutting the eye-
 “ lid; a gracious provision for the security of the
 “ eyes of so weighty a creature, whose method of
 “ taking its prey is by darting headlong on it

* *Moyle’s Works*, I. 424.

“ from

“ from a height of a hundred and fifty feet or more
 “ into the water. About four years ago, one of
 “ these birds flying over *Penzance*, (a thing that
 “ rarely happens) and seeing some pilchards lying
 “ on a fir-plank, in a cellar used for curing fish,
 “ darted itself down with such violence, that it
 “ struck its bill quite through the board (about
 “ an inch and a quarter thick) and broke its neck.”

These birds are sometimes taken at sea by a deception of the like kind. The fishermen fasten a pilchard to a board, and leave it floating; which inviting bait decoys the unwary *Gannet* to its own destruction.

In the *Cataracta of Juba* * may be found many characters of this bird: he says, that the bill is toothed: that its eyes are fiery; and that its color is white: and in the very name is expressed its furious descent on its prey. The rest of his accounts favors of fable.

We are uncertain whether the *Gannet* breeds in any other parts of *Europe* besides our own islands; except (as Mr. *Ray* suspects, the *Sula*, described in *Clusius's Exotics*, which breeds in the *Ferroe Isles*) be the same bird. In *America* there are two species of birds of this genus, that bear a great resemblance to it in their general form and their manner of preying. Mr. *Catesby* has given the figure of the head of one, which he calls the *Greater*

* *Plinii*, lib. x. c. 44.

Booby; his description suits that of the young *Gannet*; but the angle on the lower mandible made us formerly suspect that it was not the same bird; but from some late informations we have been favored with, we find it is common to both countries, and during summer frequents *North America*. Like the *Penguin*, it informs navigators of the approach of *soundings*, who on sight of it drop the plummet. *Linnaeus* classes our bird with the *Pelecan*; in the tenth edition of his system, he confounds it with the bird described by Sir *Hans Sloane*, hist. *Jam.* vol. I. p. 31. *preface*, whose colors differ from the *Gannet* in each stage of life: but in his last edition he very properly separates them. We continue it in the same class, under the generical name of *Corvorants*, as more familiar to the *English* ear than that of *Pelecan*.

A P P E N D I X.

ALCOHOL

ROUGH LEG'D FALCON.



A P P E N D I X.

Birds now extinct in GREAT BRITAIN,
or such as wander here accidentally.

L A N D B I R D S.

I. ROUGH LEG'D FALCON.

THIS species is a native of *Denmark*, but was
shot in and is preserved in the *Le-*
verian Museum.

Its length is two feet two inches: that of the wing, when closed, eighteen inches: the bill dusky; the cere yellow: the head, neck, and breast of a yellowish white, marked in some parts with oblong brown strokes: the belly of a deep brown: thighs and legs of a pale yellow, marked with brown: the scapulars blotched with brown and yellowish white: coverts of the wings brown, edged with rust: ends of the primaries deep brown; the lower parts white: the extreme half of the tail brown, tipped with dirty white: that next to the body white. Legs covered with feathers as low as the feet: the feet yellow.

II. ROLLER.

II. R O L L E R.

- | | |
|--|-------------------------------------|
| Roller. <i>Wil. orn.</i> 131. | Sprank Kraka, Blakraka, Al- |
| Garrulus <i>argentoratenfis.</i> <i>Raii</i> | lekraka. <i>Fann. Suec. sp.</i> 94. |
| <i>syn. av.</i> 41. | <i>Edw.</i> 109. |
| Galgulus, le Rollier. <i>Briffon</i> | The Shagarag. <i>Sbarw's Tra-</i> |
| <i>av.</i> II. 64 <i>tab.</i> 5. | <i>vols.</i> 252. |
| Coracias Garrula. <i>Lin. syst.</i> | Ellekrag. <i>Brunnich,</i> 35. |
| 159. | Birk-Heker; Blaue-Racke. |
| | <i>Frisch,</i> I. 57. |

OF these birds we have heard of only two being seen at large in our island; one was shot near *Helston-bridge, Cornwall*, and an account of it transmitted to us by the Reverend Doctor *William Borlase*. They are frequent in most parts of *Europe*, and we have received them from *Denmark*.

FEMALE.

In size it is equal to a jay. The bill is black, straight, and hooked at the point; the base beset with bristles: the space about the eyes is bare and naked: behind each ear is also another bare spot, or protuberance: the head, neck, breast, and belly are of a light bluish green: the back, and feathers of the wings next to it, are of a reddish brown: the coverts on the ridge of the wings are of a rich blue; beneath them of a pale green: the upper part and tips of the quill-feathers are dusky; the lower parts of a fine deep blue; the rump is of the same color: the tail consists of twelve feathers, of which the outmost on each side are considerably longer



The Roller

Mazell scil



G. Edwards pinxit.

J. Mayall pinxit.

longer than the rest; are of a light blue, and tipped with black, beneath that a spot of deep blue; as is the case with such part of the quill-feathers that are black above: the other feathers of the tail are of a dull green: the legs short, and of a dirty yellow.

It is remarkable for making a chattering noise, from which it is by some called *Garrulus*.

III. N U T C R A C K E R.

- | | |
|--------------------------------------|-----------------------------------|
| <i>Caryocatactes. Wil. orn. 132.</i> | <i>Notwecka, Notkraka. Favn.</i> |
| <i>Raii syn. av. 42.</i> | <i>Suec. sp. 19.</i> |
| <i>Nucifraga, le Casse-noix.</i> | <i>Tannen-Heher (Pine-Jay)</i> |
| <i>Briffon av. II. 59. tab. 5.</i> | <i>Frisch, l. 56.</i> |
| <i>Corvus Caryocatactes. Lin.</i> | <i>Edw. 240.</i> |
| <i>syft. 157.</i> | <i>Danis Noddekrige. Norvegis</i> |
| | <i>Not-kraake. Brunnick, 34.</i> |

THE specimen we took our description from, is the only one we ever heard was shot in these kingdoms; it was killed near *Mostyn, Flintshire, October 5, 1753.*

It was somewhat less than the jackdaw: the bill straight, strong, and black: the color of the whole head and neck, breast and body, was a rusty brown: the crown of the head and the rump were plain: the other parts marked with triangular white spots: the wings black: the coverts spotted in

DESCRIP.

in the same manner as the body : the tail rounded at the end, black tipped with white : the vent-feathers white : the legs dusky.

This bird is also found in most parts of *Europe*. We received a specimen from *Denmark*, by means of Mr. *Brunnich*, author of the *Ornithologia Borealis*, a gentleman to whose friendship we owe a numerous collection of the curiosities of his country.

It feeds on nuts, from whence the name.

IV. The O R I O L E.

Oriolus Galbula. *Lin. syst.* The Witwal. *Wil. orn.* 198.
 160. *Faun. Suec.* No. 95. *Raii syn. av.* 68.
Scopoli, No. 45. *Kramer*, 360. Le Lorient. *Briffon* II. 320.
Oriolus. Gesner av. 713. *Aldr.* Golden Thrush. *Edw.* 185.
av. I. 418.

HISTORY.

THIS beautiful bird is common in several parts of *Europe*; where it inhabits the woods, and hangs its nest very artificially between the slender branches on the summits of antient oaks. Its note is loud, and resembles its name. I have heard of only one being shot in *Great Britain*, and that in *South Wales*.

DESCRIP.

It is of the size of a thrush : the head and whole body of the male is of a rich yellow : the bill red ;
 from

THE ORIOLE M. & F.







G. Edwards pinxit.

Platzoll frei

from that to the eye a black line : the wings black, marked with a bar of yellow : the ends of the feathers of the same color : the two middle feathers of the tail black ; the rest black, with the ends of a fine yellow : the legs dusky.

The body of the female is of a dull green : the wings dusky : the tail of a dirty green : the ends of the exterior feathers whitish.

V. The ROSE COLORED OUSEL.

Merula rosea. *Raii syn. av.* *Briffon av.* II. 250.
67. Aldr. av. II. 283. *Turdus roseus.* *Lin. syst.* 294.
Wil. orn. 194. *Faun. Succ. sp.* 219.
Le Merle Couleur de Rose. *Edw.* 20.

MR. *Edwards* discovered this beautiful bird twice in our island, near *London*, at *Norwood*, and another time in *Norfolk*. The figure of this and the preceding, were copied, by permission, from his beautiful and accurate designs, which we gratefully acknowledge, as well as every other assistance from our worthy friend ; whose pencil has done as much honor to our country, as the integrity of his heart, and communicative disposition, has procured him esteem from a numerous and respectable acquaintance.

The size of this bird appears by the print to be equal
 VOL. II. T t

DESCRIP.

equal to that of a stare. The bill at the point is black, at the base a dirty flesh color: the head is adorned with a crest hanging backwards. The head, crest, neck, wings, and tail are black, glossed with a changeable blue, purple and green: the breast, belly, back, and lesser coverts of the wings, are of a rose color, mixed with a few spots of black: the legs of a dirty orange color.

This bird is found in *Lapland*, *Italy*, and *Syria*. About *Aleppo* it is called the *locust bird*, possibly from its food; and appears there only in summer*. In *Italy* it is styled the sea-stare; and as *Aldrovandus* says, frequents heaps of dung†. And Mr. *Ekmarck* ‡ informs us, that it resides in *Lapland*, never passing beyond the limits of that frozen region. We have mentioned very opposite climes, but believe it to be a scarce bird in all, at least in *Europe*.

* *Russel's hist. Alp.* 70. *Tavernier*, 146.

† *Aldr. av.* II. 283.

‡ *Migr. av. Amæn. acad.* IV. 594.



Desmarestus p. m.

Mayall fecit

W A T E R F O W L.

VI. The C R A N E.

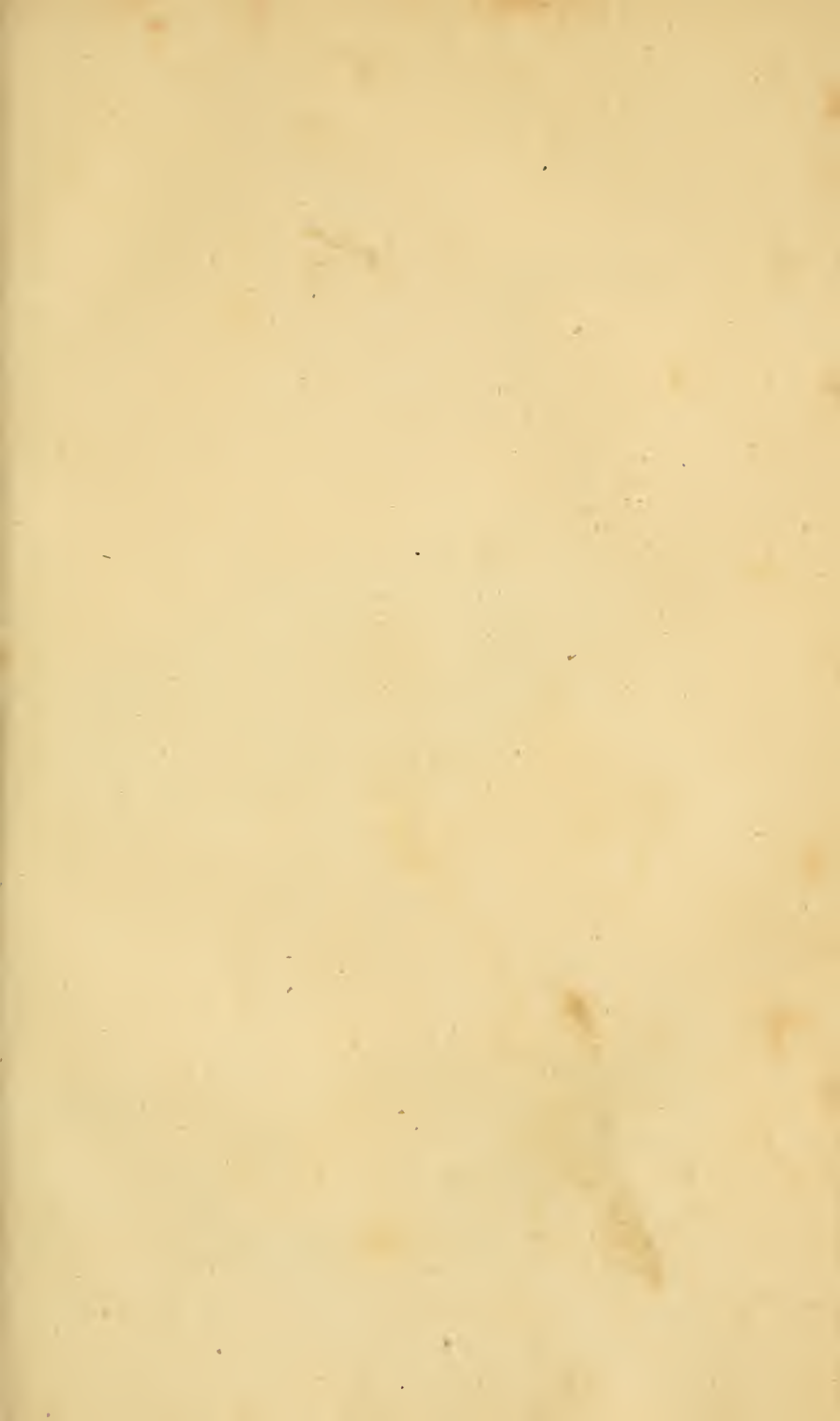
- | | |
|-------------------------------------|--------------------------------------|
| Le Grue. <i>Belon av.</i> 187. | <i>tab.</i> 33. |
| Grus. <i>Gesner av.</i> 528. | Kranich. <i>Kram.</i> 345. |
| A Crane. <i>Turner.</i> | Kranich. <i>Frisch</i> , ll. 194. |
| Gru, Grua. <i>Aldr. av.</i> III. | Ardea Grus. <i>Lin. syst.</i> 234. |
| 132. | Trana. <i>Faun. Suec. sp.</i> 161. |
| <i>Wil. orn.</i> 274. | <i>Danis</i> Trane. <i>Brunnich.</i> |
| <i>Raii syn. av.</i> 95. | <i>Br. Zool.</i> 118. |
| La Grue. <i>Briffon av.</i> V. 374. | |

THIS species was placed, in the folio edition of the *Zoology*, among the *British* birds, on the authority of Mr. *Ray*; who informs us, that in his time, they were found during the winter in large flocks in *Lincolnshire* and *Cambridgeshire*: but on the strictest enquiry we learn, that at present the inhabitants of those counties are scarcely acquainted with them; we therefore conclude, that these birds have forsaken our island. A single bird was killed near *Cambridge* about three years ago, and is the only instance I ever knew of the crane being seen in this island in our time. They were formerly in high esteem at our tables, for the delicacy of their flesh; for they feed only on grain, herbs, or insects; so have nothing of the rankness of the piscivorous birds of this genus.

DESCRIP. Its weight is about ten pounds; the length six feet; the bill of a darkish green, four inches long; and a little depressed on the top of the upper mandible: the top of the head covered with black bristles; the back of the head bald and red, beneath which is an ash colored spot: from the eyes, of each side, is a broad white line the whole length of the neck: the fore part as far as the breast is black: the quill-feathers are black: the tail ash colored, tipped with black: all the rest of the plumage is ash colored. The legs are black.

No author, except *Gesner*, takes notice of a large tuft of feathers that spring out of one pinion on each wing: they are unwebbed, and finely curled at the ends, which the birds have power to erect or depress; when depressed they hang over and cover the tail. *Gesner* tells us, that these feathers used in his time to be set in gold, and worn as ornaments in caps. Though this species seems to have forsaken these islands at present, yet it was formerly a native, as we find in *Willughby*, p. 52. that there was a penalty of twenty-pence for destroying an egg of this bird; and *Turner* relates, that he has very often seen their young in our marshes. *Marsigli** says, that the crane lays two eggs like those of a goose, but of a bluish color.

* *Hist. Danub. V. p. 8.*





Desmoulins pinx

The Egret

Mazell fecit

VII. The E G R E T.

Lesser White Heron. <i>Wil.</i>	Dwarf Heron. <i>Barbot</i> , 29.
<i>orn.</i> 280.	L'Aigrette. <i>Briffon av.</i> V.
Ardea Garzetta. <i>Lin. syst.</i>	431.
237.	Kleiner Weißer Rager. <i>Kram.</i>
Ardea Alba minor. <i>Raii syn.</i>	345.
<i>av.</i> 99.	

WE once received out of *Anglesea*, the feathers of a bird shot there, which we suspect to be the *Egret*; this is the only instance perhaps of its being found in our country. That formerly this bird was very frequent here, appears by some of the old bills of fare: in the famous feast of Archbishop *Nevill*, we find no less than a thousand *Asterides**, *Egrets* or *Egrittes*, as it is differently spelt. Perhaps the esteem they were in as a delicacy during those days, occasioned their extirpation in our islands; abroad they are still common, especially in the southern parts of *Europe*, where they appear in flocks.

The *Egret* is a most elegant bird; it weighs about one pound; the length is twenty-four inches, to the end of the legs thirty-two: the bill is slender and black: the space about the eyes naked and

DESCRIB.

* *Godwin de Præsul. Angl. com. Leland's Collect.*

green: the irides of a pale yellow: the head adorned with a beautiful crest, composed of some short, and of two long feathers, hanging backward; these are upwards of four inches in length: the whole plumage is of a resplendent whiteness: the feathers on the breast, and the scapulars, are very delicate, long, slender, and unwebbed, hanging in the lightest and loofest manner: the legs are of a dark green almost black: the scapulars and the crest were formerly much esteemed as ornaments for caps and head-pieces; so that *aigrette* and *egret* came to signify any ornament to a cap, though originally the word was derived from *aigre*, *a cause de l'aigreur de sa voix* *.

We never met with this bird or the crane in *England*, but formed our descriptions from specimens in the elegant cabinet of Doctor *Mauduit* in *Paris*.

* *Belon av.* 195.



VIII. The LITTLE BITTERN.

- Ardeola (le Blongios) *Brif-* Moofs-kuh.) *Kram.* 348.
son av. V. 497. *tab.* 40. Boonk or long Neck. *Shaw's*
fig. 1. *Travels,* 255.
Ardea vertice dorsoque ni- Ardea Minuta. *Lin. fyst.* 240.
gris, collo antice et alarum Kleiner Rohrdommel. *Frisch,*
testricibus lutescentibus. II. 206. 207.
(Stauden Ragerl, Kleine *Edw. av.* 275.

THIS species was shot as it perched on one of the trees in the *Quarry* or public walks in *Shrewsbury*, on the banks of the *Severn*; it is frequent in many other parts of *Europe*, but the only one we ever heard of in *England*.

The length to the tip of the tail was fifteen inches, to the end of the toe twenty. The bill to the corners of the mouth two inches and a half long, dusky at the point; the sides yellow; the edge jagged: the bulk of the body not larger than that of a *fieldfare*.

DESCRIP.

The top of the head, the back, and tail were black, glossed with an obscure green: the neck is very long, the forepart of which, the breast and thighs, were of a buff color: the belly and vent-feathers white: the hind-part of the neck bare of feathers, but covered with those growing on the side

of it: on the setting on of the wing is a large chesnut spot: the lesser coverts of a yellowish buff; the larger coverts whitish: the web of that next the back half buff and half black: the quill-feathers black: the legs and toes dusky; and what is singular in a bird of this genus, the feathers grow down to the knees: the inside of the middle claw is serrated.

For this description, and the drawing, we are indebted to Mr. *Plymley*.



IX. The SPOON-BILL.

- | | | |
|-----------------------|-----------------------|--|
| Pelecanus seu Platea. | <i>Gesner</i> | <i>Raii syn. av.</i> 102. |
| av. 666. | | Platalea Leucorodia. <i>Lin. syst.</i> |
| Albardeola. | <i>Aldr. av.</i> III. | 231. <i>Faun. Suec.</i> No. 160. |
| 160. | | <i>Briffon V.</i> 352. |
| Spoon-bill. | <i>Wil. orn.</i> 288. | Löffel-gans. <i>Scopoli</i> , No. 115. |

A FLOCK of these birds migrated into the marshes near *Yarmouth*, in *Norfolk*, in *April*, 1774. These birds inhabit the continent of *Europe*. In Mr. *Ray*'s time, they bred annually in a wood at *Sevenbuys*, not remote from *Leyden*: but the wood is now destroyed; and these birds, with several others that formerly frequented the country, are at present become very rare.

Mr,

SPOONBILL.



Mr. *Joseph Sparsball* of *Yarmouth* favored me with the following very accurate description:

The length from the end of the beak to the extremity of the middle toe forty inches: breadth of the wings, extended, fifty-two inches: bill, length of the upper mandible seven inches; of the lower six three-fourths ditto: breadth of the spoon, near the point, two inches; ditto of the nether mandible one inch seven-eighths: breadth of both, in the narrowest part, near the middle, three-fourths of an inch: a bright orange colored spot, about the breadth of a sixpence, just above the point of the upper mandible, which is a little hooked, or bent downward at its extremity. At the angles of the bill, on each cheek, a spot of a bright orange color: the skin between the sides of the lower mandible, and extending about three inches downward on the throat or neck, covered with very fine down, almost imperceptible, which, with the skin on that part, are of a very bright orange color: irides of the eyes a bright flame color, very lively and vivid: the whole bill (except the above spot) of a fine shining black: its upper surface elegantly waved with dotted protuberances: a depressed line extending from the nostrils (which are three-eighths of an inch long, and situate half an inch below the upper part of the bill) is continued round it about one eighth of an inch from its edge: its substance has something of the appearance of whale bone, thin, light, and elastic. Inside
of

of the mouth a dark ash color, almost black: the tongue (remarkably singular) being very short, heart shaped, and when drawn back, serving as a valve to close the entrance of the throat, which it seems to do effectually; when pulled forward has the appearance of a triangular button: the ears, or auditory apertures large, and placed an inch behind the angles of the mouth. Plumage of the whole body, wings, and tail white: on the back-part of the head a beautiful crest of white feathers, hanging pendent behind the neck; their length about five inches; which, in the living subject, gives it a very beautiful appearance.

Weight of the fowl, three days after killed, was three pounds and a half.

The legs black, their length six inches, and thighs the same; the latter naked about half their length; toes connected by a small web, extending to the first joint on each.

No. I.

ADDITIONS TO THE HISTORY OF THE HORSE.

THE representative of this species is a native of *Yemine*, in *Arabia Felix*; the property of Lord *Grosvenour*, taken from a picture in possession of his Lordship, painted by Mr. *Stubbs*, an artist not less happy in representing animals in their stiller moments, than when agitated by their furious passions; his matchless paintings of horses will be lasting monuments of the one, and that of the lion and panther of the other.

HORSE.

This horse, by its long residence among us, may be said to be naturalized, therefore we hope to be excused for introducing it here, notwithstanding its foreign descent. From its great beauty it may be presumed that it derives its lineage from *Monaki Shaduki*, of the pure race of horses, purer than milk*.

* Vide the *Arabian* certificate, in a following note, for the meaning of this phrase.

Arabia

Arabia produces these noble animals in the highest perfection; first, because they take their origin from the wild unmixed breeds that formerly were found in the deserts *, which had as little degenerated from their primæval form and powers as the lion, tiger, or any other creature which still remains in a state of nature unchanged by the discipline of man, or harvested provision.

The *Arabs* place their chief delight in this animal; it is to them † as dear as their family, and is indeed part of it: men, women, children, mares, and foals all lie in one common tent, and they lodge promiscuously without fear of injury.

This

* *Leo Africanus*, who wrote in the time of *Leo X.* says, that in his days great numbers of wild horses were found in the *Numidian* and *Arabian* Deserts, which were broke for use. He adds, that the trial of their swiftness was made against the *Lant*, or the *Ostrich*; and if they could overtake either of those animals, were valued at a hundred camels. *Hist. Africa*, 339.

† As a proof of this, receive the following lamentation of an *Arab*, obliged, thro' poverty, to part with his mare: *My eyes*, says he, to the animal, *my soul, must I be so unfortunate as to have sold thee to so many masters, and not to keep thee myself? I am poor, my ANTELOPE. You know well enough, my honey, I have brought thee up as my child; I never beat nor chid thee; I made as much of thee as ever I could for my life. God preserve thee my dearest; thou art pretty; thou art lovely; God defend thee from the looks of the envious.* To understand the first part of this speech, it must be observed, that it is usual for many

This constant intercourse produces a familiarity that could not otherwise be effected; and creates a tractability in the horses that could arise only from a regular good usage; little acts of kindness, and a soothing language, which they are accustomed to from their masters: they are quite unacquainted with the spur; the least touch with the stirrup sets these airy coursers in motion; they set off with a fleetness that surpasses that of the Ostrich*, yet they are so well trained as to stop in their most rapid speed by the slightest check of the rider: there are sometimes instances of their being mounted without either bridle or saddle, when they shew such compliance to their rider's will, as to be directed in their course by the meer motion of a switch†.

*Paret in obsequium lentæ moderamine virgæ,
Verbera sunt præcepta fugæ, sunt verbera fræna ‡.*

Several things concur to maintain this perfection in the horses of *Arabia*, such as the great care the *Arabs* take in preserving the breed genuine, by permitting none but stallions of the first form to have

many *Arabs*, of the poorer rank, to join in the purchase of a horse, the original owner generally retaining one share. This, as well as most of the other particulars relating to the *Arabian* horse, are taken from *M. D'Arvieux's* curious account of *Arabia*, p. 167, *London*, 1732.

* For an account of its speed, *vide Adanson's voy.* 85.

† *Tavernier's Travels*, I. 63.

‡ *Nemesion Cyneg.* 267.

access to the mares : this is never done but in the presence of a witness, the secretary of the *Emir*, or some public officer ; he asserts the fact, records the name of the horse, mare, and whole pedigree of each, and these attestations * are carefully preserved, for on these depend the future price of the foal.

The

* The reader is here presented with an original attestation, some of which *M. D'Arvieux* says have been preserved for above 500 years in the public records.

Taken before ABDORRAMAN, KADI
of ACCA.

The Occasion of this present Writing or Instrument is that at ACCA in the House of *Badi* legal establish'd Judge, appear'd in Court *Thomas Usgate* the English Consul and with him *Sheikh Morad Ebn al Hajj Abdollah*, *Sheikh* of the County of *Safad*, and the said Consul desir'd from the aforesaid *Sheikh* proof of the Race of the Grey Horse which he bought of him, and He affirm'd to be *Monaki Shadûbi* *, but he was not satisfied with this but desir'd the Testimony of the *Arabs*, who bred the Horse and knew how he came to *Sheikh Morad* ; whereupon there appear'd certain *Arabs* of Repute whose names are undermention'd, who testified and declar'd that the Grey Horse which the Consul formerly bought of *Sheikh Morad*, is *Monaki Shadûki* of the pure Race of Horses, purer than Milk †, and that the Beginning of the Affair

* These are the Names of the two Breeds of Arab Horses, which are reckoned pure and true, and those which are of both these Breeds by Father and Mother, are the most noble and free from Bastardy.

† A Proverbial Expression.

was,

The *Arabs*, whose riches are their horses, take all imaginable care of them; they have it not in their power to give them grass in their hot climate, except in the spring; their constant food is barley, and that given only in the night, being never suffered to eat during the day.

In the day-time they are kept saddled at the door of the tent, ready for any excursion their masters may make; the *Arabs* being fond of the chase, and live by the plundering of travellers. The horses are never hurt by any servile employ, never injured by heavy burthens, or by long journies, enjoy a pure dry air, due exercise, great temperance, and great care.

was, that *Sheikh Saleh*, *Sheikh of Alsabal*, bought him of the *Arabs* of the Tribe of *al Mohammadat*, and *Sheikh Saleh* sold him to *Sheikh Morad Ebn al Hajj Abdellah*, *Sheikh of Safad*, and *Sheikh Morad* sold him to the Consul aforesaid, when these Matters appear'd to us, and the Contents were known, the said Gentleman desir'd a Certificate thereof, and Testimony of the Witnesses, whereupon we wrote him this Certificate, for him to keep as a Proof thereof. Dated Friday 28 of *i. e.* 29 January, 1722.
the latter *Rabi* in the Year 1135.

Witnesses,

Sheikh Jumat al Falibau of the *Arabs*
of *al Mohammadat*.

Ali Ebn Taleb al Kaabi.

Ibrahim his Brother.

Mohammed al Adhra Sheikh Alfurifat.

Khamis al Kaabi.

Every

Every horse in *Arabia* (except those which by way of contempt are called *Guidich*, or pack horses) has a degree of good qualities superior to those of any other places; but it is not to be supposed, but that there are certain parts of that country, which have attained a higher perfection in the art of management than the others.

Thus we find by some late information*, that *Yemine* in *Arabia Felix*, is at present in great repute for its breed; for the jockies of that part have acquired such a superior name, as to be able to sell their three year old horses for two or three hundred guineas a-piece, and when they can be prevailed on to part with a favorite *stallion*, they will not take less for it than fifteen hundred guineas. It is from this country that the great men in *India* are supplied with horses, for *India* itself is possessed of a very bad kind; these noble animals being much neglected there, from the constant use of the *Buffalo*, not only in tillage, but even in riding.

It may be allowed here to give some account of the horses of other countries, which derive their origin, or at least receive their improvement from the *Arabian* kind, for wheresoever the *Saracens* spread their victorious arms, they, at the same time, introduced their generous race of horses.

Those of *Persia* are light, swift, and very like those of *Arabia*, but formed very narrow before:

* *Wall on horses*, 74.

they are fed with chopped straw, mixed with barley, and instead of foiling, are fed with new eared or green barley for about fourteen or twenty days*.

Æthiopia has with some writers the credit of having originally furnished *Arabia* with its fine race of horses; but we believe the reverse, and that they were introduced into that empire by the *Arabian* princes, whose lineage to this day fills that throne. The horses of that country are spirited and strong, and generally of a black color: they are never used in long journies, but only in battle or in the race, for all servile work is done by mules: the *Æthiopians* never shoe them, for which reason, on passing through stony places, they dismount, and ride on mules, and lead their horses†; so from this we may collect, that this nation is not less attached to these animals than the *Arabs*.

Ægypt has two breeds of horses, one its own, the other *Arabian*; the last are most esteemed, and are bought up at a great price, in order to be sent to *Constantinople*; but such is the discouragement, arising from the tyranny of the government, that the owners often wilfully lame a promising horse‡, lest the *Beys* should like it and force it from them.

Barbary owes its fine horses to the same stock, but in general they are far inferior in point of value; and for the same reason as is given in the last arti-

* *Tavernier's Travels*, I. 145.

† *Ludolph. hist. Æthiop.* 53.

‡ *Univ. modern hist.* quoted from *Maillet* and *Pocock*.

cle, the great insecurity of property under the *Turkish* government. The breed was once very famous: M. *D'Arvieux** says, that when he was there in 1668, he met with a mare that he thought worthy of the stud of his *grand Monarque*, when in the height of his glory; but Doctor *Shaw* informs us, that at present the case is entirely altered †.

Notwithstanding *Spain* has been celebrated of old for the swiftness of its horses, yet it must have received great improvement from those brought over by their conquerors, the *Saracens*. According to *Oppian* ‡, the *Spanish* breed had no other merit than that of fleetness, but at present we know that they have several other fine qualities.

To sum up the account of this generous animal, we may observe, that every country that boasts of a fine race of horses, is indebted to *Arabia*, their primæval seat. No wonder then, that the poetic genius of the author of the book of *Job*, who not only lived on the very spot, but even at time when the animal creation still enjoyed much of its original perfection, should be able to compose that sublime description which has always been the admiration of every person of genuine taste §.

* *D'Arvieux*, 173.

† *Shaw's Travels*, 238.

‡ *Cyneg. lib. I. V.* 284.

§ *Job. ch. XXXIX. v. 19. to 25.*

No. II.

OF THE TAKING OF WOLVES, &c.

Ex Autographo penes Dec. et Capit. Exon.

From Bp. LYTTELTON's Collections.

JOHAN. comes *Moreton* omnibus hominibus et amicis suis *Francis* et *Anglicis* presentibus et futuris salutem sciatis nos concess.^{se} reddidisse et hac cartamea confirmasse comit. baron militibus et omnibus libere tenentibus clericis et laicis in *Devenescire* libertates suas foreste quas habuerunt tempore *Henrici* Reg. proavi mei tenendas et habendas illis et heredibus suis de me et heredibus meis et nominatim quod habeant arcus et pharetras, et sagittas in terris suis deferendas extra regardum foreste mee, et quod canes sui vel hominum suorum, non sint espaltati extra regardum foreste, et quod habeant canes suos et alias libertates, sicut melius et liberius illas habuerunt tempore ejusd. *Henrici* Regis et Reisellos suos, et quod capiant Capreolum, Vulpem, Cattum, Lupum, Leporem, Lutram, ubicunque illam inveniunt extra

tra regardum foreste mee. Et ideo vobis firmiter precipio, quod nullus eis, de hiis vel aliis libertatibus suis molestiam inferat vel gravamen. Hiis testibus *Will. Marefcall. Will. comite Saresbur. Will. com. de Vernon. Steph. Ridell* cancellario meo, *Will. de Wenn. Hamone de Valoin, Rogero de Novoburgo, Ingelram de Pincoll. Rob. de Moritomari, Waltero Maltravers. Rad. Morin. Walt. de Cantelu. Gilberti Morin* et multis aliis.

Seal appendant, an armed man on horseback, and on the reverse, a small impresson from an antique head — the legend broken.

No. III.

OF THE CHOICE OF HIS MAJESTY'S
HAWKS.

TO all those to whome this present Writinge shall come I Sr. *Anthony Pell* Knight Maister Faulkner Surveyor and Keeper of his Majesties Hawkes send greetinge, Whereas I am credibly informed that divers persons who doe usuallie bringe Haukes to sell doe commonlye convey them from shipbord and custome howse before such tyme as I or my servants or deputies have any sight or choise of them for his Majesties use whereby his Highness is not nor hath not lately beene furnished with the number of Hawkes as is most meete, Wherefore theis are in his Majesties name to will charge and commaund you and every of you that shall at any tyme hereafter bringe any Hawkes to sell, That neither you nor any of you nor any others for you or by your appointment doe remove or convey awaye any of your Hawkes whatsoever from shipbord or the custome house untill such tyme as the bearer hereof my welbeloved friend *William Spence* Gent. have his first choise

for his Majesties service, And that you and every one of you do quietly permitt and suffer the said *Wm. Spence* the bearer hereof to take his choise and make tryal of such of your Hawkes as he shall thinke meete with a gorge or two of meat before such tyme as his Majesties price be paide beeing as hereafter followeth, viz for a Faulcon twenty six shillings and eight pence, for a Tassell gentle thirteene shillings and four pence, for a Lanner twenty six shillings and eight pence, for a Lannarett thirteene shillings and foure pence, for a Gosshawke twentie shillings, for a Tassell of a Gosshawke thirteene shillings and foure pence, for a Gerfaulkon thirtie shillings, for a Jerkin thirteen shillings and fourepence, hereof sayle you not as you will answere the contrary at your perills. Dated the six and twentieth day *Januarie* Anno Domini 1621.

This warrant to endure untill the first daye of *August* next comeinge.

No. IV.

OF THE SMALL BIRDS OF FLIGHT,

By the Hon^{ble}. DAINES BARRINGTON.

IN the suburbs of *London* (and particularly about *Shoreditch*) are several weavers and other tradesmen, who, during the months of *October* and *March*, get their livelihood by an ingenious, and we may say, a scientific method of bird-catching, which is totally unknown in other parts of *Great Britain*.

The reason of this trade being confined to so small a compass, arises from there being no considerable sale for singing birds except in the *metropolis*: as the apparatus for this purpose is also heavy, and at the same time must be carried on a man's back, it prevents the bird-catchers going to above three or four miles distance.

This method of bird-catching must have been long practised, as it is brought to a most systematical perfection, and is attended with a very considerable expence.

The nets are a most ingenious piece of mechanism, are generally twelve yards and a half long,

and two yards and a half wide; and no one on bare inspection would imagine that a bird (who is so very quick in all its motions) could be caught by the nets flapping over each other, till he becomes eye witness of the pullers seldom failing*.

The wild birds *fly* (as the bird-catchers term it) chiefly during the month of *October*, and part of *September* and *November*; as the flight in *March* is much less considerable than that of *Michaelmas*. It is to be noted also, that the several species of *birds of flight* do not make their appearance precisely at the same time, during the months of *September*, *October* and *November*. The Pippet †, for example, begins to *fly* about *Michaelmas*, and then the Woodlark, Linnet, Goldfinch, Chaffinch, Greenfinch, and other birds of flight succeed; all of which are not easily to be caught, or in any numbers, at any other time, and more particularly the Pippet and the Woodlark.

These birds, during the *Michaelmas* and *March* flights, are chiefly on the wing from day break to noon, though there is afterwards a small *flight* from two till night; but this however is so incon-

* These nets are known in most parts of *England* by the name of *day-nets* or *clap-nets*; but all we have seen are far inferior in their mechanism to those used near *London*.

† A small species of Lark, but which is inferior to other birds of that *Genus* in point of song.

siderable,

siderable, that the bird-catchers always take up their nets at noon.

It may well deserve the attention of the naturalist whence these periodical flights of certain birds can arise. As the ground however is ploughed during the months of *October* and *March* for sowing the winter and lent corn, it should seem that they are thus supplied with a great profusion both of seeds and insects, which they cannot so easily procure at any other season.

It may not be improper to mention another circumstance, to be observed during their flitting, viz. that they fly always against the wind; hence, there is great contention amongst the bird-catchers who shall gain that point, if (for example) it is westerly, the bird catcher who lays his nets most to the east, is sure almost of catching every thing, provided his call-birds are good: a gentle wind to the south-west generally produces the best sport.

The bird-catcher, who is a substantial man, and hath a proper apparatus for this purpose, generally carries with him five or six *linnets* (of which more are caught than any singing bird) two *goldfinches*, two *greenfinches*, one *woodlark*, one *redpoll*, a *yellowhammer*, *titlark*, and *aberdavine*, and perhaps a *bullfinch*; these are placed at small distances from the nets in little cages. He hath, besides, what are called *flur-birds*, which are placed with-
in

in the nets, are raised upon the *flur**, and gently let down at the time the wild bird approaches them. These generally consist of the *linnet*, the *goldfinch*, and the *greenfinch*, which are secured to the *flur* by what is called a *brace*†; a contrivance that secures the birds without doing any injury to their plumage.

It having been found that there is a superiority between bird and bird, from the one being more *in song* than the other; the bird-catchers contrive that their *call birds* should moult before the usual time. They, therefore, in *June* or *July*, put them into a close box, under two or three folds of blankets, and leave their dung in the cage to raise a greater heat; in which state they continue, being perhaps examined but once a week to have fresh water. As for food, the air is so putrid, that they eat little during the whole state of confinement, which lasts about a month. The birds frequently die under the operation‡; and hence the value of a *stopped bird* rises greatly.

When

* A moveable perch to which the bird is tied, and which the bird-catcher can raise at pleasure, by means of a long string fastened to it.

† A sort of bandage, formed of a slender silken string that is fastened round the bird's body, and under the wings, in so artful a manner as to hinder the bird from being hurt, let flutter ever so much in the raising.

‡ We have been lately informed by an experienced bird-catcher,

When the bird hath thus prematurely moulted, he is *in song*, whilst the wild birds are *out of song*, and his note is louder and more piercing than that of a wild one; but it is not only in his note he receives an alteration, the plumage is equally improved. The black and yellow in the wings of the *goldfinch*, for example, become deeper and more vivid, together with a most beautiful gloss, which is not to be seen in the wild bird. The bill, which in the latter is likewise black at the end, in the *stopped bird* becomes white and more taper, as do its legs: in short, there is as much difference between a wild and a *stopped bird*, as there is between a horse which is kept in body cloaths, or at grass.

When the bird-catcher hath laid his nets, he disposes of his *callbirds* at proper intervals. It must be owned, that there is a most malicious joy in these *call-birds* to bring the wild ones into the same state of captivity; which may likewise be observed with regard to the decoy ducks.

Their sight and hearing infinitely excels that of the bird catcher. The instant that the * wild birds are perceived, notice is given by one to the rest of

catcher, that he pursues a cooler regimen in *stopping* his birds, and that he therefore seldom loses one: but we suspect that there is not the same certainty of making them moult.

* It may be also observed, that the moment they see a hawk, they communicate the alarm to each other by a plaintive note; nor will they then *jerk* or call though the wild birds are near,

the

the *call-birds*, (as it is by the first hound that hits on the scent, to the rest of the pack) after which, follows the same sort of tumultuous *ecstasy* and joy. The *call-birds*, while the bird is at a distance, do not sing as a bird does in a chamber; they invite the wild ones by what the bird-catchers call *short jerks*, which when the birds are good, may be heard at a great distance. The ascendancy by this call or invitation is so great, that the wild bird is stopped in its course of flight, and if not already acquainted with the nets*, lights boldly within twenty yards of perhaps three or four bird-catchers, on a spot which otherwise it would not have taken the least notice of. Nay, it frequently happens, that if half a flock only are caught, the remaining half will immediately afterwards light in the nets, and share the same fate; and should only one bird escape, that bird will suffer itself to be pulled at till it is caught, such a fascinating power have the *call-birds*.

While we are on this subject of the *jerking* of birds, we cannot omit mentioning, that the bird-catchers frequently lay considerable wagers whose *call-bird* can *jerk* the longest, as that determines the superiority. They place them opposite to each other, by an inch of candle, and the bird who

* A bird, acquainted with the nets, is by the bird-catchers termed a *sharper*, which they endeavour to drive away, as they can have no sport whilst it continues near them.

jerks the ofteneft, before the candle is burnt out, wins the wager. We have been informed, that there have been instances of a bird's giving a hundred and feventy *jerks* in a quarter of an hour; and we have known a linnet, in fuch a trial, perfevere in its emulation till it swooned from the perch: thus, as *Pliny* fays of the nightingale, *viſta morte finit ſæpe vitam, ſpiritu prius deficiente quàm cantu* *.

It may be here obſerved, that birds when near each other, and in fight, ſeldom *jerk* or ſing. They either fight, or uſe ſhort and wheedling calls; the *jerking* of theſe *call-birds*, therefore, face to face, is a moſt extraordinary inſtance of contention for ſuperiority in ſong.

It may be alſo worthy of obſervation, that the female of no ſpecies of birds ever ſings: with birds, it is the reverſe of what occurs in human kind: among the feathered tribe, all the cares of life fall to the lot of the tender ſex: theirs is the fatigue of incubation; and the principal ſhare in nurſing the helpleſs brood: to alleviate theſe fatigues, and to ſupport her under them, nature hath given to the male the ſong, with all the little blandiſhments and ſoothing arts; theſe he fondly exerts (even after courtſhip) on ſome ſpray contiguous to the neſt, during the time his mate is performing her parental duties. But that ſhe ſhould be ſilent, is alſo a-

* *Lib. x. c. 29.*

nother wise provision of nature, for her song would discover her nest; as would a gaudiness of plumage, which, for the same reason, seems to have been denied her.

To these we may add a few particulars that fell within our notice during our enquiries among the bird-catchers, such as, that they immediately kill the hens of every species of birds they take, being incapable of singing, as also being inferior in plumage; the *pippets* likewise are indiscriminately destroyed, as the cock does not sing well: they sell the dead birds for three-pence or four-pence a dozen.

These small birds are so good, that we are surprized the luxury of the age neglects so delicate an acquisition to the table. The modern *Italians* are fond of small birds, which they eat under the common name of *Beccaficos*: and the dear rate a *Roman Tragedian* paid for one dish of singing birds* is well known.

Another particular we learned, in conversation with a *London* bird-catcher, was the vast price that is sometimes given for a single song bird, which

* *Maximè tamen insignis est in hac memoria, Clodii Æsopi tragici histrionis patina sexcentis H. S. taxata; in quo posuit aves cantu aliquo, aut humano sermone, vocales.* Plin. lib. x. c. 51. The price of this expensive dish was about 6843 *l.* 10 *s.* according to *Arbuthnot's* Tables. This seems to have been a wanton caprice, rather than a tribute to epicurism. T. P.

had not learned to whistle tunes. The greatest sum we heard of, was five guineas for a *chaffinch*, that had a particular and uncommon note, under which it was intended to train others : and we also heard of five pounds ten shillings being given for a *call-bird linnet*.

A third singular circumstance, which confirms an observation of *Linnaeus*, is, that the male *chaffinches* fly by themselves, and in the *flight* precede the females ; but this is not peculiar to the *chaffinches*. When the *titlarks* are caught in the beginning of the season, it frequently happens, that forty are taken and not one female among them : and probably the same would be observed with regard to other birds (as has been done with relation to the *wheat-ear*) if they were attended to.

An experienced and intelligent bird-catcher informed us, that such birds as breed twice a year, generally have in their first brood a majority of males, and in their second, of females, which may in part account for the above observation.

We must not omit mention of the *bulfinch*, though it does not properly come under the title of a singing bird, or a bird of *flight*, as it does not often move farther than from hedge to hedge ; yet, as the bird sells well on account of its learning to whistle tunes, and sometimes flies over the fields where the nets are laid ; the bird-catchers have often a *call-bird* to ensnare it, though most of them can imitate the call with their mouths. It is remarkable

markable with regard to this bird, that the female answers the purpose of a *call-bird* as well as the male, which is not experienced in any other bird taken by the *London* bird-catchers.

It may perhaps surprize, that under this article of *singing birds*, we have not mentioned the *night-ingle*, which is not a bird of *flight*, in the sense the bird-catchers use this term. The *nightingale*, like the *robin*, *wren*, and many other singing birds, only moves from hedge to hedge, and does not take the periodical *flights* in *October* and *March*. The persons who catch these birds, make use of small trap-nets, without call-birds, and are considered as inferior in dignity to other bird-catchers, who will not rank with them.

The nightingale being the first of singing birds, we shall here insert a few particulars relating to it, that were transmitted to us since the description of that bird was printed.

Its arrival is expected, by the trappers in the neighborhood of *London*, the first week in *April*; at the beginning none but cocks are taken, but in a few days the hens make their appearance, generally by themselves, though sometimes a few males come along with them.

The latter are distinguished from the females not only by their superior size, but by a great swelling of their vent, which commences on the first arrival of the hens.

They

They do not build till the middle of *May*, and generally chuse a quickset to make their nest in.

If the nightingale is kept in a cage, it often begins to sing about the latter end of *November*, and continues its song more or less till *June*.

A young *Canary bird*, *linnet*, *skylark*, or *robin* (who have never heard any other bird) are said best to learn the note of a *nightingale*.

They are caught in a net-trap; the bottom of which is surrounded with an iron ring; the net itself is rather larger than a cabbage net.

When the trappers hear or see them, they strew some fresh mould under the place, and bait the trap with a meal-worm from the baker's shop.

Ten or a dozen nightingales have been thus caught in a day.

No. V.

EXPERIMENTS AND OBSERVATIONS ON THE SINGING OF BIRDS, BY THE HON. DAINES BARRINGTON. IN A LETTER TO MATHEW MATY, M.D. SEC. R. S. 1773.

From the PHILOSOPHICAL TRANSACTIONS, Vol. LXIII.

DEAR SIR,

AS the experiments and observations I mean to lay before the Royal Society relate to the singing of birds, which is a subject that hath never before been scientifically treated of*, it may not be improper to prefix an explanation of some uncommon terms, which I shall be obliged to use, as well as others which I have been under a necessity of coining.

* *Kircher*, indeed, in his *Musurgia*, hath given us some few passages in the song of the nightingale, as well as the call of a quail and cuckow, which he hath engraved in musical characters. These instances, however, only prove that some birds have in their song, notes which correspond with the intervals of our common scale of the musical octave.

To

To *chirp*, is the first sound which a young bird utters, as a cry for food, and is different in all nestlings, if accurately attended to; so that the hearer may distinguish of what species the birds are, though the nest may hang out of his sight and reach.

This cry is, as might be expected, very weak and querulous; it is dropped entirely as the bird grows stronger, nor is afterwards intermixed with its song, the *chirp* of a nightingale (for example) being hoarse and disagreeable.

To this definition of the *chirp*, I must add, that it consists of a single sound, repeated at very short intervals, and that it is common to nestlings of both sexes.

The *call* of a bird, is that sound which it is able to make, when about a month old; it is, in most instances (which I happen to recollect) a repetition of one and the same note, is retained by the bird as long as it lives, and is common, generally, to both the cock and hen*.

The next stage in the notes of a bird is termed, by the bird-catchers, *recording*, which word is

* For want of terms to distinguish the notes of birds, *Belon* applies the verb *chantent*, or sing, to the goose and crane, as well as the nightingale. "Plusieurs oiseaux *chantent* la nuit, comme est l'oye, la grue, & le rossignol." *Belon's Hist. of Birds*, p. 50.

probably derived from a musical instrument, formerly used in *England*, called a recorder*.

This attempt in the nestling to sing, may be compared to the imperfect endeavour in a child to babble. I have known instances of birds beginning to *record* when they were not a month old.

This first essay does not seem to have the least rudiments of the future song; but as the bird grows older and stronger, one may begin to perceive what the nestling is aiming at.

Whilst the scholar is thus endeavouring to form his song, when he is once sure of a passage, he commonly raises his tone, which he drops again when he is not equal to what he is attempting; just as a singer raises his voice, when he not only recollects certain parts of a tune with precision, but knows that he can execute them.

What the nestling is not thus thoroughly master of, he hurries over, lowering his tone, as if he did not wish to be heard, and could not yet satisfy himself.

I have never happened to meet with a passage in any writer, which seems to relate to this stage of

* It seems to have been a species of flute, and was probably used to teach young birds to pipe tunes.

Lord *Bacon* describes this instrument to have been strait, to have had a lesser and greater bore, both above and below, to have required very little breath from the blower, and to have had what he calls a *fipple*, or stopper. See his second Century of Experiments.

singing in a bird, except, perhaps, in the following lines of *Statius* :

----- “ Nunc volucrum novi
 “ Questus, inexpertumque carmen,
 “ Quod tacitâ statuere brumâ.”

Stat. Sylv. L. IV. Ecl. 5.

A young bird commonly continues to *record* for ten or eleven months, when he is able to execute every part of his song, which afterwards continues fixed, and is scarcely ever altered *.

When the bird is thus become perfect in his lesson, he is said to *sing his song round*, or in all its varieties of passages, which he connects together, and executes without a pause.

I would therefore define a bird's *song* to be a succession of three or more different notes, which are continued without interruption during the same interval with a musical bar of four crotchets in an adagio movement, or whilst a pendulum swings four seconds.

By the first requisite in this definition, I mean to

* The bird called a *Twite* * by the bird-catchers commonly flies in company with linnets, yet these two species of birds never learn each other's notes, which always continue totally different.

* *Br. Zool.* Vol. II. p. 315. 8vo. present edition, I. p. 293.

exclude the call of a cuckow, or *clucking* of a hen *, as they consist of only two notes; whilst the short bursts of singing birds, contending with each other (called *jerks* by the bird-catchers) are equally distinguished from what I term *song*, by their not continuing for four seconds.

As the notes of a cuckow and hen, therefore, though they exceed what I have defined the *call* of a bird to be, do not amount to its *song*, I will, for this reason, take the liberty of terming such a succession of two notes as we hear in these birds, the *varied call*.

Having thus settled the meaning of certain words, which I shall be obliged to make use of, I shall now proceed to state some general principles with regard to the singing of birds, which seem to result from the experiments I have been making for several years, and under a great variety of circumstances.

Notes in birds are no more innate, than language is in man, and depend entirely upon the master under which they are bred, as far as their organs will enable them to imitate the sounds which they have frequent opportunities of hearing.

Most of the experiments I have made on this subject have been tried with cock linnets, which were fledged and nearly able to leave their nest, on

* The common hen, when she lays, repeats the same note very often, and concludes with the sixth above, which she holds for a longer time.

account not only of this bird's docility, and great powers of imitation, but because the cock is easily distinguished from the hen at that early period, by the superior whiteness in the wing*.

In many other sorts of singing birds the male is not at the age of three weeks so certainly known from the female; and if the pupil turns out to be a hen,

----- "ibi omnis
"Effusus labor."

The *Greek* poets made a songster of the τετλιξ, whatever animal that may be, and it is remarkable that they observed the female was incapable of singing as well as hen birds:

Εἰτ' εἰσιν οἱ τετλιγες καὶ εὐδαιμονες,
Ὡν ταῖς γυναῖξιν οὐ δ' ὅτιαν φωνῆς ἐνι;

Comicorum Græcorum Sententiæ, p. 452. Ed. Steph.

I have indeed known an instance or two of a hen's making out something like the song of her species; but these are as rare as the common hen's being heard to crow.

I rather suspect also, that those parrots, magpies, &c. which either do not speak at all, or very little, are hens of those kinds.

* The white reaches almost to the shaft of the quill feathers, and in the hen does not exceed more than half of that space: it is also of a brighter hue.

I have educated nestling linnets under the three best singing larks, the *skylark*, *woodlark*, and *titlark*, every one of which, in stead of the linnet's song, adhered entirely to that of their respective instructors.

When the note of the *titlark-linnet* * was thoroughly *fixed*, I hung the bird in a room with two common linnets, for a quarter of a year, which were full in song; the *titlark-linnet*, however, did not borrow any passages from the linnet's song, but adhered stedfastly to that of the titlark.

I had some curiosity to find out whether an *European* nestling would equally learn the note of an *African* bird: I therefore educated a young linnet under a *vengolina* †, which imitated its *African* master so exactly, without any mixture of the linnet song, that it was impossible to distinguish the one from the other.

* I thus call a bird which sings notes he would not have learned in a wild state; thus by a *skylark-linnet*, I mean a linnet with the skylark song; a *nightingale-robin*, a *robin* with the nightingale song, &c.

† This bird seems not to have been described by any of the ornithologists; it is of the *finch* tribe, and about the same size with our aberdavine (or fiskin). The colors are grey and white, and the cock hath a bright yellow spot upon the rump. It is a very familiar bird, and sings better than any of those which are not *European*, except the *American mocking bird*. An instance hath lately happened, in an aviary at *Hamsted*, of a *vengolina*'s breeding with a *Canary* bird.

This

This *vengolina-linnet* was absolutely perfect, without ever uttering a single note by which it could have been known to be a linnet. In some of my other experiments, however, the nestling linnet retained the *call* of its own species, or what the bird-catchers term the linnet's *chuckle*, from some resemblance to that word when pronounced.

I have before stated, that all my nestling linnets were three weeks old, when taken from the nest; and by that time they frequently learn their *own call* from the parent birds, which I have mentioned to consist of only a single note.

To be certain, therefore, that a nestling will not have even the *call* of its species, it should be taken from the nest when only a day or two old; because, though nestlings cannot see till the seventh day, yet they can hear from the instant they are hatched, and probably, from that circumstance, attend to sounds, more than they do afterwards, especially as the call of the parents announces the arrival of their food.

I must own, that I am not equal myself, nor can I procure any person to take the trouble of breeding up a bird of this age, as the odds against its being reared are almost infinite. The warmth indeed of incubation may be, in some measure, supplied by cotton and fires; but these delicate animals require, in this state, being fed almost perpetually, whilst the nourishment they receive should
not

not only be prepared with great attention, but given in very small portions at a time.

Though I must admit, therefore, that I have never reared myself a bird of so tender an age, yet I have happened to see both a linnet and a goldfinch which were taken from their nests when only two or three days old.

The first of these belonged to Mr. *Matthews*, an apothecary at *Kensington*, which, from a want of other sounds to imitate, almost articulated the words *pretty boy*, as well as some other short sentences: I heard the bird myself repeat the words *pretty boy*; and Mr. *Matthews* assured me, that he had neither the note or call of any bird whatsoever.

This talking linnet died last year, before which, many people went from *London* to hear him speak.

The goldfinch I have before mentioned, was reared in the town of *Knighton* in *Radnorshire*, which I happened to hear, as I was walking by the house where it was kept.

I thought indeed that a *wren* was singing; and I went into the house to inquire after it, as that little bird seldom lives long in a cage.

The people of the house, however, told me, that they had no bird but a goldfinch, which they conceived to sing its own natural note, as they called it; upon which I staid a considerable time in the room, whilst its notes were merely those of a *wren*, without the least mixture of goldfinch.

On further inquiries, I found that the bird had been taken from the nest when only a day or two old, that it was hung in a window which was opposite to a small garden, whence the nestling had undoubtedly acquired the notes of the wren, without having had any opportunity of learning even the *call* of the goldfinch.

These facts, which I have stated, seem to prove very decisively, that birds have not any innate ideas of the notes which are supposed to be peculiar to each species. But it will possibly be asked, why, in a wild state, they adhere so steadily to the same song, in so much, that it is well known, before the bird is heard, what notes you are to expect from him.

This, however, arises entirely from the nestling's attending only to the instruction of the parent bird, whilst it disregards the notes of all others, which may perhaps be singing round him.

Young *Canary* birds are frequently reared in a room where there are many other sorts; and yet I have been informed, that they only learn the song of the parent cock.

Every one knows, that the common house-sparrow, when in a wild state, never does any thing but chirp: this, however, does not arise from want of powers in this bird to imitate others; but because he only attends to the parental note.

But, to prove this decisively, I took a common sparrow from the nest when it was fledged,
and

and educated him under a linnet: the bird, however, by accident, heard a goldfinch also, and his song was, therefore, a mixture of the linnet and goldfinch.

I have tried several experiments, in order to observe, from what circumstances birds fix upon any particular note when taken from the parents; but cannot settle this with any sort of precision, any more than at what period of their *recording* they determine upon the song to which they will adhere.

I educated a young *robin* under a very fine nightingale; which, however, began already to be out of song, and was perfectly mute in less than a fortnight.

This *robin* afterwards sung three parts in four *nightingale*; and the rest of his song was what the bird-catchers call *rubbish*, or no particular note whatsoever.

I hung this robin nearer to the nightingale than to any other bird; from which first experiment I conceived, that the scholar would imitate the master which was at the least distance from him.

From several other experiments, however, which I have since tried, I find it to be very uncertain what notes the nestlings will most attend to, and often their song is a mixture; as in the instance which I before stated of the sparrow.

I must own also, that I conceived, from the experiment of educating the *robin* under a nightingale, that the scholar would fix upon the note
which

which it first heard when taken from the nest; I imagined likewise, that, if the nightingale had been fully in song, the instruction for a fortnight would have been sufficient.

I have, however, since tried the following experiment, which convinces me, so much depends upon circumstances, and perhaps caprice in the scholar, that no general inference, or rule, can be laid down with regard to either of these suppositions.

I educated a nestling robin under a woodlark-linnet, which was full in song, and hung very near to him for a month together: after which, the robin was removed to another house, where he could only hear a skylark-linnet. The consequence was, that the nestling did not sing a note of woodlark (though I afterwards hung him again just above the woodlark-linnet) but adhered entirely to the song of the skylark-linnet.

Having thus stated the result of several experiments, which were chiefly intended to determine, whether birds had any innate ideas of the notes, or song, which is supposed to be peculiar to each species, I shall now make some general-observations on their singing; though perhaps the subject may appear to many a very minute one.

Every poet, indeed, speaks with raptures of the harmony of the groves; yet those even, who have good musical ears, seem to pay little attention to it, but as a pleasing noise.

I am also convinced (though it may seem rather paradoxical

paradoxical), that the inhabitants of *London* distinguish more accurately, and know more on this head, than of all the other parts of the island taken together.

This seems to arise from two causes.

The first is, that we have not more musical ideas which are innate, than we have of language; and therefore those even, who have the happiness to have organs which are capable of receiving a gratification from this sixth sense (as it hath been called by some) require, however, the best instruction.

The *orchestra* of the opera, which is confined to the metropolis, hath diffused a good stile of playing over the other bands of the capital, which is, by degrees, communicated to the fidler and ballad-singer in the streets; the organs in every church, as well as those of the *Savoyards*, contribute likewise to this improvement of musical faculties in the *Londoners*.

If the singing of the ploughman in the country is therefore compared with that of the *London* blackguard, the superiority is infinitely on the side of the latter; and the same may be observed in comparing the voice of a country girl and *London* house-maid, as it is very uncommon to hear the former sing tolerably in tune.

I do not mean by this, to assert that the inhabitants of the country are not born with as good musical organs; but only, that they have not the same opportunities of learning from others, who play in tune themselves.

The

The other reason for the inhabitants of *London* judging better in relation to the song of birds, arises from their hearing each bird sing distinctly, either in their own or their neighbours shops; as also from a bird continuing much longer in song whilst in a cage, than when at liberty; the cause of which I shall endeavour hereafter to explain.

They who live in the country, on the other hand, do not hear birds sing in their woods for above two months in the year, when the confusion of notes prevents their attending to the song of any particular bird; nor does he continue long enough in a place, for the hearer to recollect his notes with accuracy.

Besides this, birds in the spring sing very loud indeed; but they only give short jerks, and scarcely ever the whole compass of their song.

For these reasons, I have never happened to meet with any person, who had not resided in *London*, whose judgment or opinion on this subject I could the least rely upon; and a stronger proof of this cannot be given, than that most people, who keep *Canary* birds do not know that they sing chiefly either the titlark, or nightingale notes*.

Nothing,

* I once saw two of these birds which came from the *Canary Islands*; neither of which had any song at all; and I have been informed, that a ship brought a great many of them, not long since, which sung as little.

Most of those *Canary* birds, which are imported from the
Tyrol,

Nothing, however, can be more marked than the note of a nightingale called its *jug*, which most of the *Canary* birds brought from the *Tyrol* commonly have, as well as several nightingale *strokes*, or particular passages in the song of that bird.

I mention this superior knowledge in the inhabitants of the capital, because I am convinced, that, if others are consulted in relation to the singing of birds, they will only mislead, instead of giving any material or useful information*.

Birds in a wild state do not commonly sing above ten weeks in the year; which is then also confined to the cocks of a few species; I conceive, that this last circumstance arises from the superior strength of the muscles of the larynx.

Tyrol, have been educated by parents, the progenitor of which was instructed by a nightingale; our *English Canary* birds have commonly more of the titlark note.

The traffick in these birds makes a small article of commerce, as four *Tyrolexe* generally bring over to *England* sixteen hundred every year; and though they carry them on their backs one thousand miles, as well as pay 20 l. duty for such a number, yet, upon the whole, it answers to sell these birds at 5 s. a piece.

The chief place for breeding *Canary* birds is *Inspruck* and its environs, from whence they are sent to *Constantinople*, as well as every part of *Europe*.

* As it will not answer to catch birds with clap-nets any where but in the neighbourhood of *London*, most of the birds which may be heard in a country town are nestlings, and consequently cannot sing the supposed natural song in any perfection.

I pro-

I procured a cock nightingale, a cock and hen blackbird, a cock and hen rook, a cock linnet, as also a cock and hen chaffinch, which that very eminent anatomist, Mr. *Hunter*, F. R. S. was so obliging as to dissect for me, and begged, that he would particularly attend to the state of the organs in the different birds, which might be supposed to contribute to singing.

Mr. *Hunter* found the muscles of the larynx to be stronger in the nightingale than in any other bird of the same size; and in all those instances (where he dissected both cock and hen) that the same muscles were stronger in the cock.

I sent the cock and hen rook, in order to see whether there would be the same difference in the cock and hen of a species which did not sing at all. Mr. *Hunter*, however, told me, that he had not attended so much to their comparative organs of voice, as in the other kinds; but that, to the best of his recollection, there was no difference at all.

Strength, however, in these muscles, seems not to be the only requisite; the birds must have also great plenty of food, which seems to be proved sufficiently by birds in a cage singing the greatest part of the year *, when the wild ones do not
(as

* Fish also which are supplied with a constant succession of palatable food, continue in season throughout the greatest part of the year; trouts, therefore, when confined in a stew

(as I observed before) continue in song above ten weeks.

The food of singing birds consists of plants, insects, or seeds, and of the two first of these there is infinitely the greatest profusion in the spring.

As for seeds, which are to be met with only in the autumn, I think they cannot well find any great quantities of them in a country so cultivated as *England* is; for the seeds in meadows are destroyed by mowing; in pastures, by the bite of the cattle; and in arable, by the plough, when most of them are buried too deep for the bird to reach them*.

I know well that the singing of the cock-bird in the spring is attributed by many† to the motive only of pleasing its mate during incubation.

They, however, who suppose this, should recollect, that much the greater part of birds do not sing at all: why should their mate therefore be deprived of this solace and amusement?

The bird in a cage, which, perhaps, sings nine or ten months in a year, cannot do so from this inducement; and, on the contrary, it arises chiefly from contending with another bird, or indeed against almost any sort of continued noise.

and fed with minnows, are almost at all seasons of a good flavour, and are red when dressed.

* The plough indeed may turn up some few seeds, which may still be in an eatable state.

† See, amongst others, *M. de Buffon*, in his lately-published Ornithology.

Superiority

Superiority in song gives to birds a most amazing ascendancy over each other; as is well known to the bird-catchers by the fascinating power of their call-birds, which they contrive should moult prematurely for this purpose.

But, to shew decisively that the singing of a bird in the spring does not arise from any attention to its mate, a very experienced catcher of nightingales hath informed me, that some of these birds have *jerked* the instant they were caught. He hath also brought to me a nightingale, which had been but a few hours in a cage, and which burst forth in a roar of song.

At the same time this bird is so sulky on its first confinement, that he must be crammed for seven or eight days, as he will otherwise not feed himself; it is also necessary to tie his wings, to prevent his killing himself against the top or sides of the cage.

I believe there is no instance of any bird's singing which exceeds our black bird in size; and possibly this may arise from the difficulty of its concealing itself, if it called the attention of its enemies, not only by bulk, but by the proportionable loudness of its notes*.

I should rather conceive, it is for the same reason that no henbird sings, because this talent would be still more dangerous during incubation; which

* For the same reason, most large birds are wilder than the smaller ones.

may possibly also account for the inferiority in point of plumage.

I shall now consider how far the singing of birds resembles our known musical intervals, which are never marked more minutely than to half notes; because, though we can form every gradation from half-note to half-note, by drawing the finger gently over the string of a violin, or covering by degrees the hole of a flute; yet we cannot produce such a minute interval at command, when a quarter-note for example might be required.

Ligon, indeed, in his history of *Barbadoes*, hath the following passage: “The next bird is of the
“colour of the fieldfare; but the head is too large
“for the body; and for that reason she is called
“a counsellor. She performs that with her voice,
“which no instrument can play, or voice can sing;
“and that is quarter-notes, her song being com-
“posed of them, and every one a note higher than
“another.”

Ligon appears, from other parts of his work, to have been musical; but I should doubt much whether he was quite sure of these quarter intervals, so as to speak of them with precision.

Some passages of the song in a few kinds of birds correspond with the intervals of our musical scale (of which the cuckow is a striking and known instance): much the greater part, however, of such song is not capable of musical notations.

This arises from three causes: the first is, that
the

the rapidity is often so great, and it is also so uncertain when they may stop, that we cannot reduce the passages to form a musical bar, in any time whatsoever.

The second is, that the pitch of most birds is considerably higher * than the most shrill notes of those instruments, which contain even the greatest compass.

I have before said, that our ideas of a voice, or instrument, being perfectly in tune or not, arise from comparing it with the musical intervals to which we are most accustomed.

As the upper and lower parts of every instrument, however, are but seldom used, we are not so well acquainted with the intervals in the highest and lowest octaves, as we are with those which are more central; and for this reason the harpsichord-tuners find it more difficult to tune these extreme parts.

As a bird's pitch, therefore, is higher than that of an instrument, we are consequently at a still

* Dr. Wallis is mistaken in part of what he supposes to be the cause of shrillness in the voice, "Nam ut tubus, sic tra-chea longior, & strictior, sonum efficit magis acutum." Grammar, p. 3.

The narrower the pipe is, the more sharp the pitch as he rightly observes; but the length of the tube hath just the contrary effect, because players on the flute always insert a longer middle-piece, when they want to make the instrument more flat.

greater loss when we attempt to mark their notes in musical characters, which we can so readily apply to such as we can distinguish with precision.

The third, however, and unsurmountable difficulty is, that the intervals used by birds are commonly so minute, that we cannot judge at all of them from the more gross intervals into which we divide our musical octave.

It should therefore be recollected, by those who have contended that the *Greeks* and *Romans* were acquainted with such more minute intervals of the octave, that they must insist the ancients had organs of sensation, with which their degenerate posterity are totally unprovided.

Though we cannot attain the more delicate and imperceptible intervals in the song of birds*, yet many of them are capable of whistling tunes with our more gross intervals, as is well known by the common instances of piping bullfinches†, and *Canary* birds.

This, however, arises from mere imitation of what they hear when taken early from the nest; for if the instrument from which they learn it is

* There have been instances indeed of persons who could whistle the notes of birds, but these are two rare to be argued from.

† These bullfinches also form a small article of commerce, and are chiefly brought from the neighbourhood of *Cologne*.

out of tune, they as readily pipe the false, as the true notes of the composition.

The next point of comparison to be made between our music and that of birds is, whether they always sing in the same pitch.

This, however, I will not presume to answer with any precision, for the reason I have before suggested; I shall, however, without reserve, give the best conjectures I can form on this head.

If a dozen singing birds of different kinds are heard in the same room, there is not any disagreeable dissonance (which is not properly resolved), either to my own ear, or to that of others, whose judgment on such a point I can more rely.

At the same time, as each bird is singing a different song, it is extraordinary that what we call harmony should not be perpetually violated, as we experience, in what is commonly called a *Dutch* concert, when several tunes are played together.

The first requisite to make such sounds agreeable to the ear is, that all the birds should sing in the same key, which I am induced to believe that they do, from the following reasons.

I have long attended to the singing of birds, but if I cannot have recourse to an instrument very soon, I cannot carry the pitch of their notes in my memory, even for a very short time.

I therefore desired a very experienced harpsichord-tuner (who told me he could recollect any particular note which he happened to hear for several hours),

to mark down when he returned home what he had observed on this head.

I had lately received an account from him of the following notes in different birds.

F. natural in woodlarks.

A. natural in common cocks.

C. natural in *Bantam* cocks.

B. flat in a very large cock.

C. falling to A. commonly in the cuckow.

A. in thrushes.

D. in some owls.

B. flat in some others.

These observations furnish five notes, viz. A. B. flat, C. D. and F. to which I can add a sixth, (viz. G.) from my own observations on a nightingale which lived three years in a cage. I can also confirm these remarks of the harpsichord-tuner by having frequently heard from the same bird C. and F.

As one should speak of the pitch of these notes with some precision, the B. flat of the spinnet I tried them by, was perfectly in tune with the great bell of *St. Paul's*.

The following notes, therefore, having been observed in different birds, viz. A. B. flat, C. D. F. and G. the E. is only wanting to complete the scale; the six other notes, however, afford sufficient data for making some conjectures, at least, with regard to the key in which birds may be supposed to sing, as these intervals can only be found

in

in the key of F. with a sharp third, or that of G. with a flat third.

I must own, I should rather suppose it to be the latter, and for the following reasons.

Lucretius says (and perhaps the conjecture is not only ingenious but well founded) that the first musical notes were learned from birds:

“ At liquidas avium voces imitauer ore
 “ Ante fuit multo, quam lævia carmina cantu
 “ Concelebrare homines possent, cantuque juvare.”

Now, of all the musical tones which can be distinguished in birds, those of the cuckow have been most attended to, which form a flat third, not only by the observations of the harpsichord tuner I have before mentioned, but likewise by those of *Kircher*, in his *Musurgia*.

I know well that there have been some late compositions, which introduce the cuckow notes in a sharp third; these composers, however, did not trouble themselves with accuracy in imitating these notes, and it answered their purpose sufficiently, if there was a general resemblance.

Another proof of our musical intervals being originally borrowed from the song of birds, arises from most compositions being in a flat third, where music is simple, and consists merely of melody.

The oldest tune I happen to have heard is a

Wells

Welsh one, called *Morva Rhydland* *, which is composed in a flat third; and if the music of the *Turks* and *Chinese* is examined in *Du Halde* and Dr. *Shaw*, half of the airs are also in the minor third.

The music of two centuries ago is likewise often in a flat third, though ninety-nine compositions out of a hundred are now in the sharp third.

The reason, however, of this alteration seems to be very clear: the flat third is plaintive, and consequently adapted to simple movements, such as may be expected in countries where music hath not been long cultivated.

There is on the other hand a most striking brilliancy in the sharp third, which is therefore proper for the amazing improvements in execution, which both singers and players have arrived at within the last fifty years.

When *Corelli's* music was first published, our ablest violinists conceived that it was too difficult to be performed; it is now, however, the first composition which is attempted by a scholar. Every year also now produces greater and greater prodigies upon other instruments, in point of execution.

I have before observed, that by attending to a nightingale, as well as a *robin* which was educated

* Or *Rhydland Marsh*, where the *Welsh* received a great defeat; *Rhydland* is in *Flintshire*. We find also, by the *Orpheus Britannicus*, that even so late as the time of *Purcell*, two parts in three of his compositions are in the flat third.

under him, I always found that the notes reducible to our intervals of the octave were precisely the same; which is another proof that birds sing always in the same key.

In this circumstance, they differ much from the human finger; because they who are not able to sing from the notes, often begin a song either above or below the compass of their voice, which they are not therefore able to go through with. As birds, however, form the same passages with the same notes, at all times, this mistake of the pitch can never happen in them.

Few fingers again can continue their own part, whilst the same passages are sung by another in a different key; or if other passages are played, though they may agree both in harmony and time.

As birds however adhere so stedfastly to the same precise notes in the same passages, though they never trouble themselves about what is called *time* or harmony in music; it follows that a composition may be formed for two piping bulfinches, in two parts, so as to constitute true harmony, though either of the birds may happen to begin, or stop, when they please.

I have therefore procured such an ingenious composition, by a very able musician*, which I send herewith; and it need scarcely be observed,

* Mr. Zeidler, who plays the violincello at Covent Garden theatre.

that

that there cannot possibly be much variety in the part of the second bulfinch. See *Tab. XI.* in the *Philosophical Transactions*, Vol. LXIII.

Though several birds have great musical powers, yet they seem to have no delicacy of sensations, as the human finger hath; and therefore the very best of them cannot be taught to exceed the insipidity of the upper part of the flute stop of an organ*, which hath not the modern improvement of a *swell*.

They are easily imposed upon by that most imperfect of all instruments, a *bird-call*, which they often mistake for the notes of their own species.

I have before observed, that perhaps no bird may be said to sing which is larger than a black bird, though many of them are taught to speak; the smaller birds, however, have this power of imitation; though perhaps the larger ones have not organs which may enable them, on the other hand, to sing.

We have the following instances of birds being taught to speak, in the time of the *Greeks* and

* Lord *Bacon* mentions, that in the instrument called a *regall* (which was a species of portable organ) there was a *nightingale* stop, in which water was made use of to produce the stronger imitation of this bird's tone. See *Cent. II. exper. 172.* Though this instrument, as well as its *nightingale* stop, is now disused, I have procured an organ pipe to be immersed partly in water, which, when blown into, hath produced a tone very similar to that of birds.

Romans, upon which we never try the same experiment. *Moschus* addresses nightingales and swallows which were thus instructed :

Αδωνίδες, πασαι τε χελιδόνες, ας ποικ' εἴεργεν,
 Ας λαλεῖν ἐδίδασκε.

Moschi Idyl. III.

Pliny mentions both a cock, thrush, and nightingales, which articulated * :

“Habebant & *Cæsares* juvenes *turdum* †, item
 “*lusciniæ* Græco atque Latino sermone dociles,
 “præterea meditantes in diem, & assidue nova lo-
 “quentes longiore etiam contextu.”

Statius also takes notice of some birds speaking, which we never attempt to teach in this manner :

“Huc doctæ stipentur aves, quæ nobile fandi
 “Jus natura dedit, plangat Phœbeius ales,
 “Auditæque memor penitus demittere voces
 “Sturnus, & *Aonio* versæ certamine picæ ;
 “Quique refert jungens iterata vocabula perdix,
 “Et quæ *Bistonio* queritur foror orba cubili ‡.”

Stat. Sylv. lib. ii. ecl. 4.

As

* *Lib. X. c. 21 & 42.*

† *Ibid.* The other *turdus* belonged to the Empress *Agrippina*.

‡ Amongst the five birds mentioned in these lines of *Statius*, there are four which are never taught to speak at present, viz. the cock, the nightingale, the common, and the red legged partridge.

As

As we find, from these citations, that so many different sorts of birds have learned to speak, and
as

As I suppose, however, that *perdix* signifies this last bird, and not the common partridge (as it is always translated), it is proper I should here give my reasons why I dissent from others, as also why I conceive that *sturnus*, in this passage, is not a *starling*, but the common partridge.

None of the ancients have described the plumage of the *perdix*; but *Aristotle*, *Ovid*, and *Pliny*, inform us of what materials the nest of this bird is composed, as well as where it is placed.

Aristotle says, that the nest is *fortified with wood**; and in another chapter †, with *thorns and wood*; neither of which are used by the common partridge, which often builds in a country where they cannot be procured.

On the contrary, *M. de Buffon* informs us, that the red legged partridge, “*se tiennent sur les montagnes qui produisent beaucoup de bruyeres, & de brossailles* ‡.

Ovid, therefore, speaking of the *perdix*, says,

“ ——— ponitque in sepibus ova §,”

where the common partridge is seldom known to build.

Pliny again informs us, “*perdices spinâ & frutice sic mu-*

* Επηλυγαζομεναι υλην. Lib. V. c. 1. Which *Stephens* renders *making a covering of wood*.

† Lib. IX. c. 8. The common partridge, however, makes its nest with hay and straw.

‡ Orn. T. II. p. 433.

§ *Ovid. Met.* Lib. VIII. l. 258. I shall also refer to l. 237, of the same book:

“*Garrula ramosâ prospexit ab ilice perdix:*”

as it is well known that the common partridge never perches upon a tree.

“*niunt*

as I have shewn that a sparrow may be taught to sing the linnet's note, I scarcely know what species

“ niunt receptaculum, ut contra feras abunde valentur *”, as also in the 52d chapter of his tenth book, that the *perdix* lays white eggs, which is not true of the common partridge.

But there are not wanting other proofs of the conjecture I have here made.

Aristotle speaking of this same bird, says, *Των μεν περδικων, αι κακηαξιζουσι, αι δε περισι †*.

Now, the word, *κακηαξιζουσι* is clearly formed from the call of the bird alluded to, which does not at all resemble that of the common partridge.

Thus also the author of the *Elegy* on the Nightingale, who is supposed by some to be *Ovid*, hath the following line :

“ *Caccabat hinc perdix, hinc gratitat improbus anser.*”

so that the call of the bird must have had something very particular, and have answered nearly, to the words *κακηαξιζει* and *caccabat*.

I find, indeed, that *M. de Buffon* contends ‡ that the *περδιξ* of *Aristotle* does not mean the common partridge, but the bartavel, with regard to which, I shall not enter into any discussion, but only observe, that most of his references are inaccurate, and that he entirely mistakes the materials of which the nest is composed, according to *Aristotle's* sixth book, and first chapter.

But the strongest proof that *perdix* signifies the red legged partridge is, that the *Italians* to this day call this bird *pernice*, and the common sort *starna* §.

This also now brings me to the proofs, of *sturnus* in this passage of *Statius* signifying the common partridge, and not the

* Lib. x. c. 23. † Lib. IV. c. 9. ‡ Orn. T. II. p. 422 § See *Olin.*

starling,

cies to fix upon, that may be considered as incapable of such imitations; for it is very clear, from several experiments before stated, that the utmost endeavours will not be wanting in the bird, if he is endowed with the proper organs.

It can therefore only be settled by educating a bird, under proper circumstances, whether he is thus qualified or not; for if one was only to determine this point by conjecture, one should suppose that a sparrow would not imitate the song of the linnet, nor that a nightingale or partridge could be taught to speak.

And here it may not be improper to explain what I mean by birds learning to imitate the notes of others, or the human speech.

Starling, which I must admit are not so strong as with regard to the import of the word *perdix*. If my arguments are not therefore so convincing on this head, the number of birds taught to speak by the *Romans*, and not by us, must be reduced to three, as the starling is frequently learned to talk in the present times.

As I cannot argue from the description of the habits of the *sturnus*, or the materials of its nest, as in the former instance, I must rest my conjecture (such as it is) on the two birds, almost following each other in these lines of *Statius*; on the common partridge being called *starna* to this day by the *Italians*, and upon the *Romans* having had otherwise no name for our partridge (which is a very common bird in *Italy*), if *sturnus* is supposed to signify only a *starling*.

If the birds differ little in shape or size (particularly of the beak *) the imitation is commonly so strong, that

“ Mirè

* It seems very obvious why the form and size of the beak may be material; but I have also observed, that the colour of a bird's bill changes, when in or out of song; and I am informed, that a cock seldom crows much, but when his comb is red.

When most of the finch tribe are coming into song, there is such a gradual change in the colour of their bill; thus, those of the chaffinch and linnet are then of a very deep blue, which fades away again, when the bird ceases to be in song.

This particular should be attended to by the ornithologist, in his description; because, otherwise, he supposes the colour of the bill to be permanent, which is by no means so.

- This alteration, however, rather seems to be the symptom than the cause of a bird's coming into song, or otherwise, and I have never attended to this circumstance in the soft billed birds sufficiently, to say whether it holds also with regard to them.

A very intelligent bird-catcher, however, was able to prognosticate, for three winters together, when a nightingale, which I kept so long, was coming into song (though there was no change in the colour of the bill), by the dung's being intermixed with large bloody spots, which before was only of a dead white.

This same bird-catcher was also very successful in his prescriptions for sick birds, with regard to the ingredients of which he was indeed very mysterious.

He said, that as he could not feel their pulse, the circumstances which he chiefly attended to were their weight, as well as both the consistence and colour of their dung.

He always frankly said what he expected from his prescrip-

“ Mirè fagaces falleret hospites

“ Discrimen obscurum.” Horat.

for, in such instances, the passages are not only the same, but the tone.

Such was the event of the experiment I have before mentioned of the linnet educated under a vengolina.

In my experiment, however, of teaching the sparrow the notes of the linnet, though the scholar imitated the passages of its master, yet the tone of the sparrow had by no means the mellowness of the original.

The imitation might therefore be, in some measure, compared to the singing of an opera song by a black-guard, when, though the notes may be precisely the same, yet the manner and tone would differ very much.

Thus also the linnet, which I heard repeat the words *pretty boy*, did not articulate like a *parrot*, though, at the same time, the words might be clearly distinguished.

The education I have therefore been speaking of will not give new organs of voice to a bird, and the instrument itself will not vary, though

tions, and that if such and such changes did not soon take place, the case was desperate. He frequently also refused to prescribe, if the bird felt too light in the hand, or he thought that there was not sufficient time to bring about an alteration in the dung.

the

the notes or passages may be altered almost at pleasure.

I tried once an experiment, which might indeed have possibly made some alteration in the tone of a bird, from what it might have been when the animal was at its full growth, by procuring an operator who caponised a young blackbird of about six weeks old; as it died, however, soon afterwards, and I have never repeated the experiment, I can only conjecture with regard to what might have been the consequences of it.

Both * *Pliny* and the *London* poulterers agree that a capon does not crow, which I should conceive to arise from the muscles of the larynx never acquiring the proper degree of strength, which seems to be requisite to the singing of a bird, from Mr. *Hunter's* dissections.

But it will perhaps be asked, why this operation should not improve the notes of a nestling, as much as it is supposed to contribute to the greater perfection of the human voice.

To this I answer, that castration by no means insures any such consequence; for the voices of much the greater part of *Italian* eunuchs are so indifferent, that they have no means of procuring a livelihood but by copying music, and this is one of the reasons why so few compositions are

* Lib. X. c. 21.



published in *Italy*, as it would starve this refuse of society.

But it may be said, that there hath been a *Farinelli* and a *Manzoli*, whose voices were so distinguishedly superior.

To this I again answer, that the catalogue of such names would be a very short one; and that we attribute those effects to castration, which should rather be ascribed to the education of these singers.

Castration commonly leaves the human voice at the same pitch as when the operation is performed; but the eunuch, from that time, is educated with a view only to his future appearance on the opera stage; he therefore manages his voice to greater advantage, than those who have not so early and constant instruction.

Considering the size of many singing birds, it is rather amazing at what a distance their notes may be heard.

I think I may venture to say, that a nightingale may be very clearly distinguished at more than half a mile*, if the evening is calm. I have also observed the breath of a *robin* (which exerted itself) so condensed in a frosty morning, as to be very visible.

* *Monf. de Buffon* says, that the quadruped which he terms the *huarine*, may be heard at the distance of a league. *Ornith. Tom. I.*

To make the comparison, however, with accuracy, between the loudness of a bird's and the human voice, a person should be sent to the spot from whence the bird is heard; I should rather conceive that, upon such trial, the nightingale would be distinguished further than the man.

It must have struck every one, that, in passing under a house where the windows are shut, the singing of a bird is easily heard, when, at the same time, a conversation cannot be so, though an animated one.

Most people, who have not attended to the notes of birds, suppose that those of every species sing exactly the same notes and passages, which is by no means true, though it is admitted that there is a general resemblance.

Thus the *London* bird-catchers prefer the song of the *Kentish* goldfinches, but *Essex* chaffinches; and when they sell the bird to those who can thus distinguish, inform the buyer that it hath such a note, which is very well understood between them*.

* These are the names which they give to some of the nightingale's notes: *Sweet*, *Sweet jug*, *Jug sweet*, *Water bubble*, *Pipe rattle*, *Bell pipe*, *Scroty*, *Skeg*, *Skeg*, *Skeg*, *Swat swat swaty*, *Whitlow whitlow whitlow*, from some distant affinity to such words.

Some of the nightingale fanciers also prefer a *Surry* bird to those of *Middlesex* *.

These differences in the song of birds of the same species cannot perhaps be compared to any thing more appolite, than the varieties of provincial dialects.

The nightingale seems to have been fixed upon, almost universally, as the most capital of singing birds, which superiority it certainly may boldly challenge: one reason, however, of this bird's being more attended to than others is, that it sings in the night †.

* Mr. *Henshaw* informs us, that nightingales in *Denmark* are not heard till May, and that their notes are not so sweet or various as with us. Dr. *Birch's* History of the Royal Society, Vol. III. p. 189. Whilst Mr. *Fletcher* (who was minister from *Q. Elizabeth* to *Russia*) says, that the nightingales in that part of the world have a finer note than ours. See *Fletcher's* Life, in the *Biographia Britannica*.

I never could believe what is commonly asserted, that the *Czar Peter* was at a considerable expence to introduce singing birds near *Peterburgh*; because it appears, by the *Fauna Suecica*, that they have in those latitudes most of the same birds with those of *England*.

† The woodlark and reedsparrow sing likewise in the night; and from hence, in the neighbourhood of *Shrewsbury*, the latter hath obtained the name of the willow-nightingale. Nightingales, however, and these two other birds, sing also in the day, but are not then distinguished in the general concert.

The

Hence *Shakespeare* says,

“ The nightingale, if she should sing by day,
 “ When every goose is cackling, would be thought
 “ No better a musician than the wren.”

The song of this bird hath been described, and expatiated upon, by several writers, particularly *Pliny* and *Strada*.

As I must own, however, that I cannot affix any precise ideas to either of these celebrated descriptions, and as I once kept a very fine bird of this sort for three years, with very particular attention to its song; I shall endeavour to do it the best justice I am capable of.

In the first place, its tone is infinitely more mellow than that of any other bird, though, at the same time, by a proper exertion of its musical powers, it can be excessively brilliant.

When this bird *sang its song round*, in its whole compass, I have observed sixteen different beginnings and closes, at the same time that the intermediate notes were commonly varied in their succession with such judgment, as to produce a most pleasing variety.

The bird which approaches nearest to the excellence of the nightingale, in this respect, is the sky lark; but then the tone is infinitely inferior in point of mellowness: most other singing birds have not above four or five changes.

The next point of superiority in a nightingale

is its continuance of song, without a pause, which I have observed sometimes not to be less than twenty seconds. Whenever respiration, however, became necessary, it was taken with as much judgment as by an opera singer.

The skylark again, in this particular, is only second to the nightingale *.

* I shall here insert a table, by which the comparative merit of the *British* singing birds may be examined, the idea of which I have borrowed from *Monf. de Piles*, in his *Cours de Peinture par Principes*. I shall not be surprized, however, if, as he suggests, many may disagree with me about particular birds, as he supposes they will do with him, concerning the merits of painters

As I have five columns instead of the four which *M. de Piles* uses, I make 20 the point of absolute perfection, instead of 16, which is his standard.

	Mellow- ness of tone.	Spright- ly notes.	Plaintive notes.	Com- pafs.	Execu- tion.
Nightingale - - -	19	14	19	19	19
Skylark - - - - -	4	19	4	18	18
Woodlark - - - - -	18	4	17	12	8
Titlark - - - - -	12	12	12	12	12
Linnet - - - - -	12	16	12	16	18
Goldfinch - - - - -	4	19	4	12	12
Chaffinch - - - - -	4	12	4	8	8
Greenfinch - - - - -	4	4	4	4	6
Hedge-sparrow - - -	6	0	6	4	4
Aberdavine (or Siskin)	2	4	0	4	4
Redpoll - - - - -	0	4	0	4	4
Thrush - - - - -	4	4	4	4	4
Blackbird - - - - -	4	4	0	2	2
Robin - - - - -	6	16	12	12	12
Wren - - - - -	0	12	0	4	4
Reed-sparrow - - -	0	4	0	2	2
Black-cap, or the Norfolk					
Mock nightingale *	14	12	12	14	14

* *Brit. Zool.* p. 262.

And here I must again repeat, that what I describe is from a caged nightingale, because those which we hear in the spring are so rank, that they seldom sing any thing but short and loud jerks, which consequently cannot be compared to the notes of a caged bird, as the instrument is overstrained.

I must also here observe, that my nightingale was a very capital bird; for some of them are so vastly inferior, that the bird-fanciers will not keep them, branding them with the name of *Frenchmen* *.

I have made no mention of the bulfinch in this table, which is commonly considered as a singing bird; because its wild note, without instructions, is a most jarring and disagreeable noise.

I have likewise omitted * the redstart (which is called by the French *Rosignol de Muraille*), as I am not sufficiently acquainted with its song, though it is admired by many; I should rather conceive, however, with *Zinanni*, that there is no very extraordinary merit in the notes.

The *London* bird-catchers also sell sometimes the yellow hammer, twite and brambling † as singing birds; but none of these will come within my definition of what may be deemed so.

* One should suppose from this, that the nightingale-catcher had heard much of the French music; which is possibly the case, as some of them live in Spittal-fields.

* Il culo ranzo é un ucello, (per quanto dicono) molto canoro, ma io tale non lo stimo. Delle uova é del nidi, p. 53.

† They call this bird a *kate*.

But

But it is not only in tone and variety that the nightingale excels; the bird also sings (if I may so express myself) with superior judgement and taste.

I have therefore commonly observed, that my nightingale began softly like the ancient orators; reserving its breath to swell certain notes, which by this means had a most astonishing effect, and which eludes all verbal description.

I have indeed taken down certain passages which may be reduced to our musical intervals; but though by these means one may form an idea of some of the notes used, yet it is impossible to give their comparative durations in point of musical time, upon which the whole effect must depend.

I once procured a very capital player on the flute to execute the notes which *Kircher* hath engraved in his *Musurgia*, as being used by the nightingale; when, from want of not being able to settle their respective lengths, it was impossible to observe any traces almost of the nightingale's song.

It may not be improper here to consider, whether the nightingale may not have a very formidable competitor in the *American* mocking-bird*; though almost all travellers agree, that the concert in the

* *Turdus Americanus minor canorus*. *Ray's Syn.* It is called by the *Indians*, *Contlatolli*; which is said to signify four hundred tongues. See also *Catesby*.

European woods is superior to that of the other parts of the globe*.

As birds are now annually imported in great numbers from *Asia*, *Africa*, and *America*, I have frequently attended to their notes, both singly and in concert, which are certainly not to be compared to those of *Europe*.

Thomson, the poet, (whose observations in natural history are much to be depended upon) makes this superiority in the *European* birds to be a sort of compensation for their great inferiority in point of gaudy plumage. Our goldfinch, however, joins to a very brilliant and pleasing song, a most beautiful variety of colours in its feathers†, as well as a most elegant shape.

It must be admitted, that foreign birds, when brought to *Europe*, are often heard to a great disadvantage; as many of them, from their great tameness, have certainly been brought up by hand, the consequence of which I have already stated from several experiments. The soft-billed birds also cannot be well brought over, as the *succedaneum* for

* See Rochefort's Hist. des Antilles, T. I. p. 366.—Ph. Tr. Abr. Vol. III. p. 563.—and Catesby.

† I cannot but think, that there would be a demand for these birds in *China*, as the inhabitants are very sedentary, and bird cages are commonly represented as hanging in their rooms. I have been informed, by a *Tyroleze*, that his best market for *Canary* birds was *Constantinople*.

insects (their common food) is fresh meat, and particularly the hearts of animals.

I have happened, however, to hear the *American* mocking-bird in great perfection at *Mess. Vogle's* and *Scott's*, in *Love-Lane, Eastcheap*.

This bird is believed to be still living, and hath been in *England* these six years. During the space of a minute, he imitated the woodlark, chaffinch, blackbird, thrush, and sparrow. I was told also, that he would bark like a dog; so that the bird seems to have no choice in his imitations, though his pipe comes nearest to our nightingale of any bird I have yet met with.

With regard to the original notes, however, of this bird, we are still at a loss; as this can only be known by those who are accurately acquainted with the song of the other *American* birds.

Kalm indeed informs us, that the natural song is excellent*; but this traveller seems not to have been long enough in *America* to have distinguished what were the genuine notes: with us, mimics do not often succeed but in imitations.

I have little doubt, however, but that this bird would be fully equal to the song of the nightingale in its whole compass; but then, from the attention which the *mocker* pays to any other sort of disagreeable noises, these capital notes would be always debased by a bad mixture.

* Vol. I. p. 219.

We have one mocking bird in *England*, which is the skylark; as, contrary to a general observation I have before made, this bird will catch the note of any other which hangs near it; even after the skylark note is *fixed*. For this reason, the bird-fanciers often place the skylark next one which hath not been long caught, in order, as they term it, to keep the caged skylark *honest*.

The question, indeed, may be asked, why the wild skylark, with these powers of imitation, ever adheres to the parental notes; but it must be recollected, that a bird when at liberty is for ever shifting its place, and consequently does not hear the same notes eternally repeated, as when it hangs in a cage near another. In a wild state therefore the skylark adheres to the parental notes; because the parent cock attends the young ones, and is heard by them for so considerable a time, during which, they pay no regard to the song of any other bird.

I am aware also, that it may be asked, how birds originally came by the notes which are peculiar to each species. My answer, however, to this is, that the origin of the notes of birds, together with its gradual progress, is as difficult to be traced, as that of the different languages in nations.

The loss of the parent-cock at the critical time for instruction hath undoubtedly produced those varieties, which I have before observed are in the song of each species; because then the nestling hath either attended to the song of some other birds;

or

or perhaps invented some new notes of its own, which are afterwards perpetuated from generation to generation, till similar accidents produce other alterations. The organs of some birds also are probably so defective, that they cannot imitate properly the parental notes, as some men can never articulate as they should do. Such defects in the parent bird must again occasion varieties, because these defects will be continued to their descendants, who (as I before have proved) will only attend to the parental song. Some of these descendants also may have imperfect organs; which will again multiply varieties in the song.

The truth is, as I have already observed, that scarcely any two birds of the same species have exactly the same notes, if any are accurately attended to, though there is a general resemblance.

Thus most people see no difference between one sheep and another, when a large flock is before them. The shepherd, however, knows each of them, and can swear to them, if they are lost; as can the *Lincolnshire* gosherd to each goose.

As I now draw towards a conclusion of both my experiments and observations on the singing of birds; it may be possibly asked, what use results either from the trouble or expence which they have cost me; both of which I admit to have been considerable.

I will readily own, that no very important advantages can be derived from them; and yet I shall

not

not decline suggesting what little profit they may possibly be of, though at best they should rather be considered as what Lord *Bacon* terms, *experiments of light, than of fruit*.

In the first place, there is no better method of investigating the human faculties, than by a comparison with those of animals; provided we make it without a most ungrateful wish of lowering ourselves, in that distinguished situation in which we are placed.

Thus we are referred to the ant for an example of industry and foresight, because it provides a magazine of food for the winter, when this animal is in a state of torpidity during that season; nor are we less willing to suppose the song of birds to be superior to our own musical powers.

The notes of many birds are certainly very pleasing, but by no means stand in competition either with the human voice or our worst musical instruments; nor only from want of the striking effects of harmony in many excellent compositions; but because, even when compared to our simple melody, expression is wanting*, without which music is so languid and inanimate.

But to return to the uses (such as they are) which may arise from attending to the song of birds, or from the experiments which I have given an account of.

* The nightingale, indeed, is perhaps an exception to this general observation.

The first of these is too much neglected by the naturalist; for, if the bird is not caught, the only means often by which either the sex or the species can be determined is the song. For example, if *Mons. Adanson* had informed us whether the *European* swallows, which he conceived were to be seen during the winter at *Senegal*, had the same notes with those of *Europe*, it would have been going one step further in proof of the facts which he and others so much rely upon.

These experiments, however, may be said to be useful to all those who happen to be pleased with singing birds; because it is clear, that, by educating a bird under several sorts, we may often make such a mixture, as to improve the notes which they would have learned in a wild state.

It results also from the experiment of the linnet being educated under the *Vengolina*, that we may introduce the notes of *Asia*, *Africa*, and *America*, into our own woods; because, if that linnet had been set at liberty *, the nestlings of the next season would have adhered to the *Vengolina* song, who would again transmit it to their descendants.

* I know well, that it is commonly supposed, if you set a caged bird at liberty, it will neither be able to feed itself, nor otherwise live long, on account of its being persecuted by the wild ones. There is no foundation, however, for this notion; and I take it to arise from its affording an excuse for continuing to keep these birds in confinement.

But

But we may not only improve the notes of birds by a happy mixture, or introduce those which were never before heard in *Great Britain* ; we may also improve the instrument with which the passages are executed.

If, for example, any one is particularly fond of what is called the song of the *Canary* bird, it would answer well to any such person, if a nestling linnet was brought up under a *Canary* bird, because the notes would be the same, but the instrument which executes them would be improved.

We learn also, from these experiments, that nothing is to be expected from a nestling brought up by hand, if he does not receive the proper instruction from the parent cock : much trouble and some cost is therefore thrown away by many persons in endeavouring to rear nestling nightingales, which, when they are brought up and fed at a very considerable expence, have no song which is worth attending to.

If a woodlark, or skylark, was educated, however, under a nightingale, it follows that this charge (which amounts to a shilling per week *) might be in a great measure saved, as well as the trouble of chopping fresh meat every day.

* *Olin* speaks of a paste which is used in *Italy* for nightingales ; but I cannot find that it ever answers with us ; perhaps, they bring their nightingales up by hand, and so accustom them from their earliest infancy to such food.

A nightingale, again, when kept in a cage, does not live often more than a year or two ; nor does he sing more than three or four months ; whereas the scholar pitched upon may not only be more vivacious, but will continue in song nine months out of the twelve.

I fear, however, that I have already dwelt too much upon these very minute and trifling advantages which may result from my experiments and observations ; I shall therefore no longer defer subscribing myself,

Dear Sir,

Your most faithful,

Humble Servant,

Daines Barrington.

No.

No. VI.

OF THE MIGRATION OF BRITISH
BIRDS.

*Quam multæ glomerantur aves! ubi frigidus annus
Trans pontum fugat, et terris immittit apricis.*

VIRGIL.

THE migration of birds, is a subject of so curious a nature, that every one who attempts to write the natural history of animals, ought to look upon it as an essential part of his inquiries, and at the same time should endeavour to assign the cause why some birds prefer certain places for their summer, others for their winter residence.

To be qualified for this task, it is necessary that the inquirer should confine himself to one certain tract the whole year; he should be diligent in observing the arrival, and the disappearance of birds; he should commit every observation to paper, and compare them with the remarks of correspondents, on the same subject, that lie on every side of him. He should attend likewise to the weather; and to the plenty or failure of fruits and

A a a 2

berries;

berries; as on these accidents many curious remarks may be founded. He should cultivate an acquaintance with the gentlemen of the navy, and other sea-faring people; he should consult their journals, to discover what birds light on their ships, at what seasons, in what latitudes, and in what weather, and from what points; and thus trace them in their very course.

A comparative view of the writings of those who should embrace this part of natural history, would throw great light on the subject. But it is to be lamented, that none, except two northern naturalists, Mr. *Klein* and Mr. *Ekmarck*, have professedly treated on this point. The southern parts of *Europe*, which may be supposed to receive, during winter, many of our land birds, have as yet produced no *faunist* to assist the inquiries of the naturalists, which must account for the imperfect knowledge we have of the retreat of many of our birds.

We must not omit, however, our acknowledgements to two eminent pens that have treated this subject as far as it related to rural œconomy; and, in such a manner, as does honour to their respective countries; we mean Mr. *Alex. Mal. Berger* and Mr. *Stillingsfleet*: whom we should not mention a second time*, but to confess the aid we here receive from their faithful attention to the subject in question.

* *Vide* Preface.

We wish that any thing we could say, would induce others of our countrymen to follow their example: they need not fear that the matter is exhausted, for every county will furnish new observations; each of which, when compared, will serve to strengthen and confirm the other. Such an amusement is worthy of every one, beneath none; but would become no order of men better than our clergy, as they are (or ought to be) the best qualified, and the most stationary part of the community; and, as this is a mixed species of study (when considered as physico-theology) it is therefore particularly pertinent to their profession. A most ingenious friend, whom modesty prevents from putting his name to a work that renders observations of this kind of the utmost facility, has pointed out the way, and methodized every remark that can occur; the farmer, the sportsman, and the philosopher, will be led to the choice of materials proper to be inserted in that useful companion, *the Naturalist's Journal* *.

From the observations of our friends, from those made by ourselves, and from the lights afforded us by preceding writers, we shall, in the brief relation we can pretend to give, proceed in a generic order, and as far as possible, trace each species of bird to its retreat.

* Printed for *W. Sandby, Fleet-Street, London, 1767.* Price One Shilling and Six-pence.

A few words will explain the cause of their disappearance in these northern regions ; a defect of food at certain seasons, or the want of a secure asylum from the persecution of man during the time of courtship, incubation and nutrition.

HAWKS.

Eagles, and all the ignoble species of this genus breed in *Great Britain* ; of the *Falcons*, we only know that which is called the *Peregrine*, which builds its nest annually in the rocks of *Llandidno*, *Caernarvonshire* ; and the *Gentil*, and the *Goshawk* which breed in *Scotland*.

OWLS.

We are assured that every species breeds in *England*, except the *little Owl*, and *short eared Owl*. The last breeds in *Scotland*, and the *Orkney isles*, but migrates into *England* at the same season as the *Woodcocks* do. Hawks and owls are birds of prey, and having at all times in this island means of living, are not obliged to quit their quarters.

SHRIKES.

The *Flusker*, or *red back Shrike*, and the great *Shrike*, breeds with us ; we have not heard of the other, so suspect that it migrates.

CROWS.

Of this genus, the *Hooded Crow* migrates regularly with the *Woodcock*. It inhabits *North Britain* the whole year : a few are said annually to breed on *Dartmoor*, in *Devonshire*. It breeds also in *Sweden* and *Austria*, in some of the *Swedish* provinces it only shifts its quarters, in others it resides

sides throughout the year. I am at a loss for the summer retreat of those which visit us in such numbers in winter, and quit our country in the spring. And for the reason why a bird, whose food is such that it may be found at all seasons in this country, should leave us.

Disappears early in autumn; the retreat of this and the following bird is quite unknown to us. CUCKOO.

Is a bird that leaves us in the winter. If its diet be ants alone, as several assert, the cause of its migration is very evident. This bird disappears before winter, and revisits us in the spring a little earlier than the *Cuckoo*. WRYNECK.

Continue with us the whole year; their food being the *larvæ* of insects, which lodge themselves at all times in the bark of trees. WOODPECKERS.

Continues here through all seasons. KING-FISHER.

Resides in this country the whole year. NUTHATCH.

Comes to *England* but by accident: we once indeed heard of a pair that attempted to make their nest in a meadow at *Selborne, Hampshire*, but were frightened away by the curiosity of people. It breeds in *Germany*. HOOPOE.

Never leaves the country. CREEPER.

GROUS. The whole tribe, except the *Quail*, lives here all the year round: that bird either leaves us, or else retires towards the sea-coasts *.

BUSTARD. Inhabits our downs and their neighborhood all the year.

PIGEONS. Some few of the *Ring-doves* breed here; but the multitude that appears in the winter, is so disproportioned to what continue here the whole year, as to make it certain that the greatest part quit the country in the spring. It is most probable they go to *Sueden* to breed, and return from thence in autumn; as Mr. *Ekmark* informs us they entirely quit that country before winter†. Multitudes of the common *Wild Pigeons* also make the northern retreat, and visit us in winter; not but numbers breed in the high cliffs in all parts of this island. We suspect that the *Turtle* leaves us in the winter, at least changes its place, removing to the southern counties.

STARE. Breeds here; possibly several remove to other countries for that purpose, since the produce of those that continue here, seems unequal to the clouds of them that appear in winter. It is not unlikely that many migrate into *Sueden*, where Mr. *Berger* observes they return in spring.

* *Vide* p. 277. of this work.

† *Amæn. Acad.* IV. 592.

The *Fieldfare* and the *Redwing* breed and pass THRUSHES.
 their summers in *Norway*, and other cold countries;
 their food is berries, which abounding in our
 kingdoms, tempts them here in the winter. These
 two and the *Royston crow*, are the only land birds
 that regularly and constantly migrate into *England*,
 and do not breed here. The *Hawfinch* and *Cross-*
bill come here at such uncertain times, as not to
 deserve the name of birds of passage; and, on that
 account, rather merit a place in the appendix than
 in the body of the work.

The *Chatterer* appears annually about *Edinburgh* CHATTER-
 in flocks during winter; and feeds on the berries ER.
 of the mountain ash. In *South Britain* it is an
 accidental visitant.

The *Grosbeak* and *Crossbill* come here but sel- GROSBEAKS.
 dom; they breed in *Austria*. I suspect that the
Pine Grosbeak breeds in the forests of the Highlands
 of *Scotland*.

All the genus inhabits this kingdom throughout BUNTINGS.
 the year, except the greater *Brambling*, which is
 forced here from the north in very severe seasons.

All continue in some parts of these kingdoms, FINCHES.
 except the *Siskin*, which is an irregular visitant,
 said to come from *Russia*. The *Linnets* shift their
 quarters, breeding in one part of this island, and
 remove

remove with their young to others. All finches feed on the seeds of plants.

LARKS,
FLY-
CATCHERS,
WAGTAILS,
AND
WARELERS.

All of these feed on insects and worms; yet only part of them quit these kingdoms; though the reason of migration is the same to all. The *Nightingale*, *Black-cap*, *Fly-catcher*, *Willow-wren*, *Wheat-ear*, and *White-throat*, leave us before winter, while the small and delicate *Golden-crested Wren* braves our severest frosts. We imagine that the migrants of this genus continue longest in *Great Britain* in the southern counties, the winter in those parts being later than in those of the north; Mr. *Stillingfleet* having observed several *Wheat-ears* in the isle of *Purbeck* the 18th of *November* last. As these birds are incapable of very distant flights, we suspect that *Spain*, or the south of *France*, is their winter asylum.

TITMICE.

Never quit this country; they feed on insects and their *larvæ*.

SWALLOWS,
AND GOAT-
SUCKER.

Every species disappears at approach of winter.

W A T E R F O W L.

OF the vast variety of water fowl that frequent *Great Britain*, it is amazing to reflect how few are known

known to breed here: the cause that principally urges them to leave this country, seems to be not merely the want of food, but the desire of a secure retreat. Our country is too populous for birds so shy and timid as the bulk of these are: when great part of our island was a mere waste, a tract of woods and fen; doubtless many species of birds (which at this time migrate) remained in security throughout the year. *Egrets*, a species of *Heron*, now scarce known in this island, were in former times in prodigious plenty; and the *Crane*, that has totally forsaken this country, bred familiarly in our marshes: their place of incubation, as well as of all other *cloven footed water fowl* (the *Heron* excepted) being on the ground, and exposed to every one: as rural œconomy increased in this country, these animals were more and more disturbed; at length, by a series of alarms, they were necessitated to seek, during the summer, some lonely safe habitation.

On the contrary, those that build or lay in the almost inaccessible rocks that impend over the *British* seas, breed there still in vast numbers, having little to fear from the approach of mankind: the only disturbance they meet with in general, being from the desperate attempts of some few to get their eggs.

CLOVEN FOOTED WATER FOWL.

HERONS. THE *White Heron* is an uncommon bird, and visits us at uncertain seasons; the common kind and the *Bittern* never leave us.

CURLEWS. The *Curlew* breeds sometimes on our mountains; but, considering the vast flights that appear in winter, we imagine the greater part retire to other countries: the *Whimbrel* breeds in the *Grampian Hills*, in the neighbourhood of *Invercauld*.

SNIPES. The *Woodcock* breeds in the moist woods of *Sweden*, and other cold countries. Some *Snipes* breed here, but we believe the greatest part retire elsewhere; as do every other species of this genus.

SANDPIPERS. The *Lapwing* continues here the whole year; the *Ruff* breeds here, but retires in winter; the *Redbank* and *Sandpiper* breed in this country, and reside here. All the others absent themselves during summer.

**PLOVERS
AND
OYSTER-
CATCHER.** The *long legged Plover* and *Sanderling* visit us only in winter; the *Dottrel* appears in spring and in autumn, yet what is very singular we do not find it breeds in *South Britain*. The *oyster-catcher* lives

lives with us the whole year. The *Norfolk Plover* and *Sea Lark* breed in *England*. The *Green Plover* breeds on the mountains of the North of *England*, and on the *Grampian Hills*.

We must here remark, that every species of the genera of *Curlews*, *Woodcocks*, *Sandpipers* and *Plovers**, that forsake us in the spring, retire to *Sweden*, *Poland*, *Prussia*, *Norway*, and *Lapland* to breed; as soon as the young can fly, they return to us again; because the frosts which set in early in those countries totally deprive them of the means of subsisting; as the dryness and hardness of the ground, in general, during our summer, prevent them from penetrating the earth with their bills, in search of worms, which are the natural food of these birds.

Every species of these two genera continue with us the whole year; the *Land Rail* excepted, which

RAILS AND
GALLI-
NULES.

* Mr. *Ekmarck* speaks thus of the retreat of the whole tribe of cloven footed water fowl out of his country (*Sweden*) at the approach of winter; and Mr. *Klein* gives much the same account of those of *Poland* and *Prussia*.

Grallæ (tanquam conjuratæ) unanimiter in fugam se conjiciunt, ne earum unicam quidem inter nos habitantem invenire possumus. *Amæn. Acad.* IV. 588.

Scolopaces et *Glareolæ* incredibilibus multitudinibus verno tempore in *Polonia* et *Borussia* nidulantur; appropinquante autumno turmatim evolant. *Klein de av. errat.* 187.

is not seen here in winter. It likewise continues in *Ireland* only during the summer months, when they are very numerous, as Mr. *Smith* tells us in the history of *Waterford*, p. 336. Great numbers appear in *Anglesea* the latter end of *May*; it is supposed that they pass over from *Ireland*, the passage between the two islands being but small. As we have instances of these birds lighting on ships in the *Channel* and the *Bay of Biscay*, we conjecture their winter quarters to be in *Spain*.

FINNED FOOTED WATER BIRDS.

PHALAROPES.

VISIT us but seldom; their breeding place is *Lapland**, and other arctic regions.

COOT.

Inhabits *Great Britain* the whole year.

GREBES.

The great crested Grebe, the black and white Grebe, and little Grebe breed with us, and never migrate; the others visit us accidentally, and breed in *Lapland*.

WEB-FOOTED BIRDS.

AVOSET.

BREED near *Fosdike* in *Lincolnshire*; but quit their quarters, in winter. They are then shot in

* *Aman. Acad.* IV. 590.

different

different parts of the kingdom, which they visit I believe not regularly but accidentally.

The *great Auk* or *Penguin* sometimes breeds in *St. Kilda*. The *Auk*, the *Guillemot* and *Puffin* inhabit most of the maritime cliffs of *Great Britain*, in amazing numbers, during summer. The *black Guillemot* breeds in the *Bass Isle*, and in *St. Kilda*, and sometimes in *Llandidno* rocks. We are at a loss for the breeding place of the other species; neither can we be very certain of the winter residence of any of them, excepting of the *lesser Guillemot* and *black-billed Auk*, which, during winter, visit in vast flocks the *Firth of Forth*.

AUKS AND
GUILLE-
MOTS.

These chiefly breed in the lakes of *Sweden* and *Lapland*, and some in countries nearer the *Pole**; but some of the *red throated Divers*, the *northern* and the *imber*, may breed in the north of *Scotland* and its isles.

DIVERS.

I am uncertain where the *black toed Gull* breeds. The *Skua* is confined to the *Shetland Isles*, the *Rock Foula*, and perhaps *St. Kilda*. The *Arctic* breeds in the *Orknies* and in the *Hebrides*. The rest of the tribe breed dispersedly on all the cliffs of *Great Britain*. The *black headed* on our fens and lakes.

GULLS.

* *Faun. Suec.* No. 150. *Grantz. Greenl.* I. 82. 83.

Every

TERNs.

Every species breeds here; but leaves us in the winter.

PETRELS.

The *Fulmar* breeds in the isle of *St. Kilda*, and continues there the whole year, except *September* and part of *October*; the *Shearwater* visits the *Isle of Man* in *April*, breeds there, and leaving it in *August* or the beginning of *September*, disperses over all parts of the *Atlantic Ocean*. The *Stormfinch* is seen at all distances from land on the same vast watery tract, nor is ever found near shore except by some very rare accident, unless in the breeding season. We found it on some little rocky isles, off the north of *Skie*. It also breeds in *St. Kilda*. We also suspect that it nestles on the *Blasquet* isles off *Kerry*, and that it is the *Gourder* of Mr. *Smith**.

MERGANSERS.

This whole genus is mentioned among the birds that fill the *Lapland* lakes during summer. I have seen the young of the *Red-breasted* in the north of *Scotland*: a few of these, and perhaps of the *Goosanders* may breed there.

DUCKs.

Of the numerous species that form this genus, we know of few that breed here. The *Swan* and *Goose*, the *Shield Duck*, the *Eider Duck*, a few *Shovelers*, *Garganies*, and *Teals*, and a very small portion of the *wild Ducks*.

* *Smith's hist. Kerry*, 186,

The rest contribute to form that amazing multitude of water fowl, that annually repair from most parts of *Europe* to the woods and lakes of *Lapland* and other *arctic* regions*, there to perform the functions of incubation and nutrition in full security. They and their young quit their retreat in *September*, and disperse themselves over *Europe*. With us they make their appearance the beginning of *October*; circulate first round our shores, and when compelled by severe frost, betake themselves to our lakes and rivers. Of the web-footed fowl there are some of hardier constitutions than others; these endure the ordinary winters of the more northern countries, but when the cold reigns there with more than common rigor, repair for shelter to these kingdoms: this regulates the appearance of some of the *Diver* kind, as also of the *wild Swans*,

* *Barentz* found the *Bernacles* with their nests in great numbers in *Nova Zembla*. *Collect. voy. Dutch East-India Company*, 8vo. 1703. p. 19. *Clusius* in his *Exot.* 368. also observes, that the *Dutch* discovered them on the rocks of that country and in *Waygate Straits*. They, as well as the other species of *wild Geese*, go very far north to breed, as appears from the histories of *Greenland* and *Spitzbergen*, by *Egede* and *Crantz*. These birds seem to make *Iceland* a resting place, as *Herrebow* observes, few continue there to breed, but only visit that island in the spring, and after a short stay, retire still further north.

The *Swallow tailed Shield Duck* breeds in the *Icy Sea*, and is forced southward only in the very hard winters. *Amæn. Acad.* IV. 585.

the *Swallow tailed Shield Duck*, and the different sorts of *Goosanders* which then visit our coasts.

CORVO-
RANTS.

The *Corvorant* and *Shag* breed on most of our high rocks: the *Gannet* in some of the *Scotch* isles, and on the coast of *Kerry*: the two first continue on our shores the whole year. The *Gannet* disperses itself all round the seas of *Great-Britain*, in pursuit of the *Herring* and *Pilchard*, and even as far as the *Tagus* to prey on the *Sardina*.

But of the numerous species of fowl here enumerated, it may be observed how very few entrust themselves to us in the breeding season; and what a distant flight they make to perform the first great dictate of nature.

There seems to be scarcely any but what we have traced to *Lapland*, a country of lakes, rivers, swamps and alps*, covered with thick and gloomy forests, that afford shelter during summer to these fowls, which in winter disperse over the greatest part of *Europe*. In those *arctic* regions, by reason of the thickness of the woods, the ground remains moist and penetrable to the *Woodcocks*, and other slender billed fowl: and for the web-footed birds†, the waters afford *larvæ* innumerable of the torment-

* *Flora Lapponica* Lectori et Proleg.

† A disciple of *Linneus*, speaks thus of their food, *Laponia*, ubi victum ex larvis et pupis culicum, altrix paravit numinis

tormenting *Knat*. The days there are long; and the beautiful meteorous nights indulge them with every opportunity of collecting so minute a food: whilst mankind is very sparingly scattered over that vast northern waste.

Why then should *Linnaeus*, the great explorer of these rude deserts, be amazed at the myriads of water fowl that migrated with him out of *Lapland*? Which exceeded in multitudes the army of *Xerxes*; covering, for eight whole days and nights, the surface of the river *Calix**. His partial observation as a botanist, would confine their food to the vegetable kingdom, almost denied to the *Lapland* waters; inattentive to a more plenteous table of insect food, which the all bountiful Creator had spread for them in the wilderness †.

numinis munificentia. *Amæn. acad.* IV. 1. 5. *M. de Maupertuis* makes the same observation, Ce ruisseau nous conduisit a un lac si rempli de petits grains jaunâtres de la grosseur du *Mil* que toute son eau en étoit teinte. Je pris ces grains pour la *Chrysalide* de quelque insecte, &c. *Oeuvres de M. de Maupertuis*, III. 116.

* *Flora Lapponica*, 273. *Amæn. acad.* IV. 570.

† It may be remarked, that the lakes of mountainous rocky countries in general are destitute of plants: few or none are seen on those of *Switzerland*; and *Linnaeus* makes the same observation in respect to those of *Lapland*; having, during his whole tour, discovered only a single specimen of a *lemna trifolca*, or ivy leaved duck's meat. *Flora Lap.* No. 470. a few of the *scirpus lacustris*, No. 18. or bullrush; the *alopecurus geniculatus*, No. 38. or fote foxtail grass; and the *ranunculus aquatilis*, No. 234. which are all he enumerates in his *Prolegomena* to that excellent performance.

B b b 2

No.

No. VII.

EXTRACTS FROM OLD ENGLISH WRITERS RELATING TO OUR ANIMALS.

MENTION having been so frequently made, in this work, of the old *English* feasts, and the species of animals that formed the good cheer; we transcribe from *Leland* an account of that given at the *intronazation* of *George Nevell*, archbishop of *York*, in the reign of *Edward IV.* and of the *goodly provision made for the same.*

In wheat, 300 quarters.	In bittors, - - 204.
In ale, - 300 tunne.	Heronshawes, - 400.
Wyne, - 100 tunne.	Fessautes, - - 200.
Of ypocrasfe - 1 pype.	Partridges, - - 500.
In oxen, - - 104.	Wodcockes, - 400.
Wylde Bulles, - - 6.	Curlewes, - - 100.
Muttons, - - 1000.	Egrittes, - - 1000.
Veales, - - - 304.	Stagges, buck and roes,
Porkes, - - 304.	500 and mo.
Swannes, - - 400.	Pasties of venison colde,
Geese, - - 2000.	4000.
Capons, - - 1000.	Parted dyshes of gellies,
Pygges, - - 2000.	1000.
Plovers, - - 400.	Playne dyshes of gellies,
Quales, - 100 dozen.	3000.
Of the foules called	Coldetartes baked, 4000.
rees, 200 dozen.	Colde custardes baked,
In peacockes, - 104.	3000.
Mallardes and teales,	Hot pasties of venison,
4000.	1500.
In cranes, - - 204.	Hot custardes, 2000.
In kyddes, - 204.	Pykes and breames, 608.
In chyckens, - 2000.	Porposes and seals, 12.
Pigeons, - - 4000.	Spices, sugared delicates,
Conyes, - - 4000.	and wafers plentie.

Besides

Besides the birds in the above list, there are mentioned, in the particular of the courses*, *Redshanks*, *Styntes*, *Larks* and *Martynettes* roſt; if the laſt were the ſame with the martin ſwallow, our anceſtors were as general devourers of ſmall birds as the *Italians* are at preſent, to whom none come amiſs.

We muſt obſerve, that in the order of the courses it appears, that only the greateſt delicacies were ſerved up, as we may ſuppoſe, to the table where the nobility, gentlemen, and gentlewomen of *worſhip* were ſeated; and thoſe ſeemed to have been dreſſed with almoſt as much art and diſguiſe as at preſent. They had likewiſe their deſert, or, as the term was, *futteltie*; which was in form of dolphins or other animals; and ſometimes recourſe was had to the kalendar to embellish the table, and *St. Paul*, *St. Thomas*, *St. Dunſtan*, and a whole multitude of *angels*, *prophetes* and *patriarkes* †, were introduced as *futtelties* to honor the day.

As no mention is made among the diſhes that compoſed two of the courses, of the geese, the pygges, the veales, and other more ſubſtantial food, thoſe muſt have been allotted to the *franklins* and *head yeomen* in the *lower hall*: and thoſe moſt ſingular proviſions, the porpoſes and ſeales, inde-

* *Leland's collection*, vi. 2.

† *Idem*, 23.

licate as they may seem at present, in old times were admitted to the best tables: the former, at least, as we learn from doctor *Caius**, who mentions it not only as a common food, but even describes its sauce.

A transcript from that curious publication, *The Regulations of the Household of the fifth Earl of NORTHUMBERLAND, begun in 1512*, will be esteemed a very proper appendage to a work of this nature. It will shew not only the birds then in high vogue at the great tables of those days, but also how capricious a thing is taste, several then of high price being at present banished from our tables; and others again of uncommon rankness much valued by our ancestors.

Thus *Wegions* (I give the spelling of the time) *See-pyes*, *Sholardes*, *Kyrlewes*, *Ternes*, *Cranys*, *Hearon-sewys*, *Bytters*, *See-gulles* and *Styntes*, were among the delicacies for principal feasts, or his Lordship's own *mees*.

Those excellent birds the *Teylles* were not to be bought except no other could be got.

Fesauntes, *Bytters*, *Hearon-sewys* and *Kyrlewes* were valued at the same price, twelve pence each.

The other birds admitted to his Lordship's table were *Bustardes*, *Mallardes*, *Woodcokes*, *Wypes*, *Quayles*, *Snypes*, *Pertryges*, *Redeshankes*, *Reys*, *Pacokes*, *Knottes*, *Dottrells*, *Larkys* and *small byrdes*.

* *Caii opusc.* 113.

The great byrdes, for the Lord's *mees*, for the Chambreleyn and Stewardes *mees* may be, as the ingenious editor conjectures, Fieldfares, Thrushes and the like*.

The estimation each species was held in may be known by the following table, to which I have added the modern name, and the reference to it in this work.

	Page.	Price.
<i>Cranys</i> , the Crane,	534,	16d.
<i>Hearon-sewys</i> , the Heron,	355,	12d.
Mallards,	500,	2d.
<i>Teylles</i> , Teal,	513,	1d.
Woodcock,	365,	1d. or 1d. $\frac{1}{2}$.
<i>Wypes</i> , Lapwings,	381,	1d.
<i>Sea-gulls</i> , Black-headed Gull,	456,	1d. or 1d. $\frac{1}{2}$.
<i>Styntes</i> , Purrs,	397,	6d. a dozen.
Quails,	234,	2d.
Snipes,	378,	3d. a dozen.
Partridges,	233,	2d.
Red-shanks,	376,	1d.
<i>Bytters</i> , Bitterns,	358,	12d.
Pheasants,	238,	12d.
<i>Reys</i> , Land Rails †,	410,	2d.

* P. 104. 424.

† I imagine the *Reys* to be the Land Rail, not the *Reeve* the female of the *Ruff*, for that bird seems not to be in vogue in those days. Old *Drayton* does not even mention it in his long catalogue of birds, but sets a high value upon

The *Rayle* which seldom comes but upon rich men's spits*.

* *Polyolbion*. Canto XXV.

B b b 4

Sbolardes,

	Page.	Price.
<i>Skolarde</i> , Shovelers,	504,	6d.
<i>Kyrleues</i> , Curlews,	362,	12d.
Peacocks,	236,	12d.
Sea Pies,	405.	
Wigeons,	509,	1d.
Knots,	387,	1d.
Dotrels,	401,	1d.
Bustards,	241.	
Terns,	459,	4d. a dozen.
Great birds,		Ditto.
Small birds,		12d. a dozen.
Larks,		12d. for two dozens.

No. VIII.

A SYSTEMATIC ARRANGEMENT OF
THE BIRDS OF GREAT BRITAIN,
WITH THE NAMES IN THE ANTIENT
BRITISH.

G E N U S I.

F A L C O N.

- | | |
|--------------------------|---------------------------------|
| 1. G OLDEN Eagle, | Eryr melyn. |
| 2. B lack Eagle, | Eryr tinwyn. |
| 3. Sea Eagle, | Mor-Eryr. |
| 4. Cinereous, | Eryr cynffonwyn. |
| 5. Osprey, | Pyſg Eryr : Gwalch
y weilgi. |
| 6. Gyr Falcon, | Hebog chwyldro. |
| 7. Peregrine Falcon, | Hebog tramor, Cam-
min. |
| 8. Grey, | Hebog, Gwalch. |
| * 9. Gentil, | Hebog mirain. |
| 10. Lanner, | Hebog gwlanog. |
| 11. Goshawk, | Hebog Marthin. |
| 12. Kite, | Barcud. |
| 13. Buzzard, | Bod teircaill. |
| 14. Spotted, | Bod mannog. |
| | 15. Honey |

15. Honey Buzzard,	Bod y mel.
16. Moor Buzzard,	Bod y gwerni.
17. Hen-Harrier,	Barcud glâs.
18. Ringtail,	Bod tinwyn.
19. Kestrel,	Cudyll côch.
20. Hobby,	Hebog yr Hedydd.
21. Sparrow Hawk,	Gwepia.
22. Merlin,	Corwalch, Llymyſten.

II.

O W L.

* 1. Eagle,	Y Ddylluan fawr.
2. Long eared,	Dylluan gorniog.
3. Short eared,	Dylluan gluſtiog.
4. White,	Dylluan wen.
5. Tawny,	Dylluan frech.
6. Brown,	Aderyn y Cyrph.
7. Little,	Coeg Ddylluan.

III.

S H R I K E.

1. Great,	Cigydd mawr.
2. Red backed,	Cigydd cefn-goch.
3. Wood chat,	Cigydd glâs.

IV.

IV.

C R O W.

- | | |
|----------------|-------------------|
| 1. Raven, | Cigfran. |
| 2. Carrion, | Brân dyddyn. |
| 3. Rook, | Ydfran. |
| 4. Hooded, | Bran yr Jwerddon. |
| 5. Magpie, | Piogen. |
| 6. Jay, | Screch y Coed. |
| 7. Red legged, | Brân big gôch. |
| 8. Jackdaw, | Cogfran. |

V.

C U C K O O.

- | | |
|------------|------|
| 1. Cuckoo, | Cog. |
|------------|------|

VI.

W R Y N E C K.

- | | |
|-------------|----------------------------|
| 1. Wryneck, | Gwas y gôg, Gwdd-
fdro. |
|-------------|----------------------------|

VII.

W O O D P E C K E R.

- | | |
|-----------|----------------------------------|
| 1. Green, | Cnocell y coed, Delor
y derw. |
| | 2. Great |

A P P E N D I X.

- | | |
|-------------------|---------------------|
| 2. Great spotted, | Delor fraith. |
| * 3. Middle. | |
| 4. Left spotted, | Delor fraith beiaf. |

VIII.

K I N G F I S H E R.

- | | |
|----------------|----------------|
| 1. Kingfisher, | Glâs y dorlan. |
|----------------|----------------|

IX.

N U T H A T C H.

- | | |
|--------------|---------------|
| 1. Nuthatch, | Delor y enau. |
|--------------|---------------|

X.

H O O P O E.

- | | |
|------------|-----------|
| 1. Hoopoe, | Y Goppog. |
|------------|-----------|

XI.

C R E E P E R.

- | | |
|-------------|--------------|
| 1. Creeper, | Y Grepianog. |
|-------------|--------------|

XII.

XII.

G R O U S.

- | | |
|---------------|--------------------------------|
| 1. Wood, | Ceiliog coed. |
| 2. Black, | Ceiliog dû. |
| 3. Red, | Ceiliog Mynydd, Jâr
fynydd. |
| 4. Ptarmigan, | Coriar yr Alban. |
| 5. Partridge, | Coriar, Petrisen. |
| 6. Quail, | Soffiar, Rhinc. |

XIII.

B U S T A R D.

- | | |
|-----------------|----------------------|
| 1. Great, | Yr araf ehedydd. |
| * 2. Lesser, | Araf ehedydd Lleiaf. |
| 3. Thick-kneed, | Y Glin-braff. |

XIV.

P I G E O N.

- | | |
|------------|-----------------------------|
| 1. Common, | Colommen. |
| 2. Ring, | Ysguthan. |
| 3. Turtle, | Colommen fair, Tur-
tur. |

XV.

XV.

S T A R E.

- | | |
|-----------|------------------|
| 1. Stare, | Drydwen, Drydwy. |
|-----------|------------------|

XVI.

T H R U S H.

- | | |
|-----------------|---------------------------------------|
| 1. Miffel, | Trefglen, Pen y Llwyn. |
| 2. Fieldfare, | Cafeg y ddryccin. |
| 3. Throftle, | Aderyn bronfraith. |
| 4. Redwing, | Soccen yr eira, Y dref-
clen gôch. |
| 5. Blackbird, | Mwyalch, Aderyn dû. |
| 6. Ring-ouzel, | Mwyalchen y graig. |
| 7. Water-ouzel, | Mwyalchen y dwfr. |

XVII.

C H A T T E R E R.

- | | |
|-----------|----------------|
| 1. Waxen, | Sidan-gynffon. |
|-----------|----------------|

XVIII.

G R O S B E A K.

- | | |
|---------|--------------|
| 1. Haw, | Gylfinbraff. |
| | * 2. Pine |

- | | |
|------------------|------------------------------|
| * 2. Pine. | |
| 3. Crofs-billed, | Gylfingroes. |
| 4. Bulfinch, | Y Chwybanydd,
Rhawn goch. |
| 5. Green, | Y Gegid, Llinos
werdd. |

XIX.

B U N T I N G.

- | | |
|--------------|---------------------------------|
| 1. Common, | Brâs y ddruttan, Brâs
yr yd. |
| 2. Yellow, | Llinos felen. |
| 3. Reed, | Golfan y cyrs. |
| 4. Tawny, | Golfan rhudd. |
| 5. Snow, | Golfan yr eira. |
| 6. Mountain, | Yr Olfan leiaf. |

XX.

F I N C H.

- | | |
|---------------|----------------------------|
| 1. Gold, | Gwas y Sierri. |
| 2. Chaff, | Afgell arian, Winc. |
| 3. Brambling, | Bronrhuddyn y my-
nydd. |
| 4. Sparrow, | Aderyn y to, Golfan. |
| | 5. Tree |

A P P E N D I X.

- | | |
|----------------------------|-----------------------|
| 5. Tree Sparrow, | Golfan y mynydd. |
| 6. Siskin, | Y Ddreiniog. |
| 7. Linnet, | Llinos. |
| 8. Red-headed Linnet, | Llinos bengoch. |
| 9. Less red-headed Linnet, | Llinos bengoch leiaf. |
| 10. Twite, | Llinos fynydd. |

XXI.

F L Y - C A T C H E R.

- | | |
|-------------|--------------------|
| 1. Spotted, | Y Gwybedog. |
| 2. Pied, | Clochder y mynydd. |

XXII.

L A R K.

- | | |
|-------------|-------------------|
| 1. Sky, | Hedydd, Uchedydd. |
| 2. Wood, | Hedydd y coed. |
| 3. Tit, | Cor Hedydd. |
| 4. Field, | Hedydd y cae. |
| 5. Red, | Hedydd rhudd. |
| 6. Crested, | Hedydd coppog. |

XXIII.

W A G T A I L.

- | | |
|-----------|---------------------------------------|
| 1. White, | Brith y fyches, Tin-
figl y gwyns. |
| | 2. Yel- |

- | | |
|------------|-----------------------|
| 2. Yellow, | Brith y fyches felen. |
| 3. Grey, | Brith y fyches lwyd. |

XXIV.

W A R B L E R S.

- | | |
|--------------------|-----------------------------|
| 1. Nightingale, | Eos. |
| 2. Redstart, | Rhonell goch. |
| 3. Redbreast, | Yr Hobigoch. Bron-
goch. |
| 4. Blackcap, | Penddu'r brwyn. |
| 5. Pettychaps, | Y Ffigyfog. |
| 6. Hedge, | Llwyd y gwrych. |
| 7. Yellow, | Dryw'r helyg. Sy-
widw. |
| * 8. Scotch. | |
| 9. Golden-crested, | Yfswigw, Sywigw. |
| 10. Wren, | Dryw. |
| 11. Sedge, | Hedydd yr helyg. |
| 12. Grasshopper, | Gwich hedydd. |
| 13. Wheatear, | Tinwyn y cerrig. |
| 14. Whinchat, | Clochder yr eithin. |
| 15. Stonechatter, | Clochder y cerrig. |
| 16. Whitethroat, | Y gwddfgwyn. |
| * 17. Dartford. | |

XXV.

T I T M O U S E.

- | | |
|----------------|-----------------------|
| 1. Great, | Y Benloyn fwyaf. |
| 2. Blue, | Y Lleian. |
| 3. Cole, | Y Benloyn lygliw. |
| 4. Marfh, | Penloyn y cyrs. |
| 5. Longtailed, | Y Benloyn gynffonhir. |
| 6. Bearded, | Y Barfog. |

XXVI.

S W A L L O W.

- | | |
|-------------|--------------------|
| 1. Chimney, | Gwennol, Gwenfol. |
| 2. Martin, | Marthin Penbwl. |
| 3. Sand, | Gennol y glennydd. |
| 4. Swift, | Marthin dû. |

XXVII.

G O A T S U C K E R.

- | | |
|---------------|-----------------------------|
| 1. Nocturnal, | Aderyn y droell,
Rhodwr. |
|---------------|-----------------------------|

XXVIII.

XXVIII.

H E R O N.

- | | |
|-------------|--------------------------------|
| 1. Common, | Cryr glâs. |
| 2. Bittern, | Aderyn y bwnn.
Bwmp y Gôrs. |
| 3. White, | Cryr gwyn. |

XXIX.

C U R L E W.

- | | |
|--------------|----------------|
| 1. Curlew, | Gylfinhir. |
| 2. Whimbrel, | Coeg ylfinhir. |

XXX.

S N I P E.

- | | |
|-----------------|------------------|
| 1. Woodcock, | Cyffyllog. |
| 2. Godwit, | Rhostog. |
| * 3. Cinereous, | Rhostog llwyd. |
| 4. Red, | Rhostog rhûdd. |
| 5. Lesser, | Cwttyd dŷ. |
| 6. Greenshank, | Coefwerdd. |
| 7. Redshank, | Coefgoch. |
| * 8. Cambridge, | |
| 9. Spotted, | Coefgoch mannog. |
| | 10. Common, |

- | | |
|--------------|---------------------|
| 10. Common, | Yfnittan, y Fyniar. |
| * 11. Great, | Yfnid. |
| 12. Jack, | Giach. |

XXXI.

S A N D P I P E R.

- | | |
|-----------------|---------------------|
| 1. Lapwing, | Cornchwigl. |
| 2. Grey, | Cwtty'n llwyd. |
| 3. Ruff, | Yr Ymladdgar. |
| 4. Knot, | Y Cnut. |
| 5. Ash colored, | Y Pibydd glâs. |
| 6. Brown, | Y Pibydd rhudd. |
| 7. Spotted, | Y Pibydd mannog. |
| 8. Black, | Y Pibydd dû mannog. |
| * 9. Gambet, | |
| 10. Turnstone, | Huttan y môr. |
| * 11. Hebridal, | |
| 12. Green, | Y Pibydd gwyrdd. |
| 13. Red, | Y Pibydd coch. |
| * 14. Aberdeen, | |
| 15. Common, | Pibydd y traeth. |
| 16. Dunlin, | Pibydd rhuddgoch. |
| 17. Purre, | Llygad yr ych. |
| * 18. Little, | Y Pibydd lleiaf. |

XXXII.

P L O V E R.

- | | |
|-----------|-----------------|
| 1. Golden | Cwtty'n yr aur. |
| | 2. Long |

- | | |
|-----------------|-------------------|
| 2. Long-legged, | Cwttn yn hîrgoes, |
| 3. Dottrel, | Huttan. |
| 4. Ringed, | Môr Hedydd. |
| 5. Sanderling, | Llwyd y tywod. |

XXXIII.

O Y S T E R C A T C H E R.

- | | |
|----------|---------------|
| 1. Pied, | Piogen y môr. |
|----------|---------------|

XXXIV.

R A I L.

- | | |
|-----------|---------|
| 1. Water, | Cwtiar. |
|-----------|---------|

XXXV.

G A L L I N U L E.

- | | |
|-------------|-----------------|
| 1. Spotted, | Dwfriar fannog. |
| 2. Crake. | Rhegen yr yd. |
| 3. Common, | Dwfriar. |

XXXVI.

P H A L A R O P E.

- | | |
|----------|--------------------------------|
| 1. Grey, | Pibydd llwyd llydan-
droed. |
|----------|--------------------------------|

A P P E N D I X.

2. Red, Pibydd côch llydan-
droed.

XXXVII.

C O O T.

1. Common, Jâr ddwfr foel.
2. Great, Jâr ddwfr foel fwyaf.

XXXVIII.

G R E B E.

1. Tippet, Gwyach. Tindroed.
2. Great crested, Gwyach gorniog.
3. Eared, Gwyach gluftiog.
4. Dusky, Gwyach leiaf.
5. Little, Harri gwlych dy big.
6. Blackchin, Gwyach gwddfrhûdd.

XXXIX.

A V O S E T.

1. Scooping, Pig mynawd.

XL.

A U K.

1. Great, Carfil mawr.
2. Razor

- | | |
|------------------|--------------------------------|
| 2. Razor-bill, | Carfil, Gwalch y pen-
waig. |
| 3. Black-billed, | Carfil gylfinddu. |
| 4. Puffin, | Pwffingen. |
| 5. Little, | Carfil bâch. |

XLII.

G U I L L E M O T.

- | | |
|-------------|------------|
| 1. Foolish, | Gwilym. |
| 2. Leffer, | Chwilog. |
| 3. Black, | Gwilym dû. |

XLII.

D I V E R.

- | | |
|--------------------|---------------------|
| 1. Northern, | Trochydd mawr. |
| * 2. Imber, | Trochydd. |
| 3. Speckled, | Trochydd bâch. |
| 4. Red-throated, | Trochydd gwddfgoch. |
| 5. Black-throated, | Trochydd gwdddfdu. |

XLIII.

G U L L.

- | | |
|------------------|------------------|
| 1. Black-backed, | Gwylan gefn-ddu. |
| 2. Skua, | Gwylan frech, |
| | 3. Black |

A P P E N D I X.

- | | |
|-----------------|---------------------------|
| 3. Black-toed, | Yr Wylan ysgafn. |
| 4. Arctic, | Gwylan y Gogledd. |
| 5. Herring, | Gwylan benwaig. |
| 6. Wagel, | Gwylan rûdd a gwyn. |
| 7. Winter, | Gwylan y gweunydd. |
| 8. Common, | Gwylan lwyd, Huc-
can. |
| 9. Kittiwake. | |
| 10. Tarrock, | Gwylan gerwyw. |
| 11. Black-head, | Yr wylan benddu. |
| 12. Brown, | Yr wylan fechan. |

XLIV.

T E R N.

- | | |
|------------|----------------------------------|
| 1. Great, | Y fôr-wennol fwyaf.
Yscraean. |
| 2. Lesser, | Y fôr-wennol leiaf. |
| 3. Black, | Yscraean ddû. |

XLV.

P E T R E L.

- | | |
|-----------------|------------------|
| 1. Fulmar, | Gwylan y graig. |
| 2. Shear-water, | Pwffingen Fanaw. |
| 3. Stormy, | Cas gan Longwr. |

XLVI.

XLVI.

M E R G A N S E R.

- | | |
|------------------|---------------------|
| 1. Goosander, | Hwyad ddanheddog. |
| 2. Red-breasted, | Trochýdd danheddog. |
| 3. Smew, | Lleian wen. |
| 4. Red-headed, | Lleian ben-goch. |

XLVII.

D U C K.

- | | |
|-------------------|-----------------------------------|
| 1. Wild Swan, | Alarch gwyllt. |
| 2. Tame Swan, | Alarch. |
| * 3. Grey Lag, | Gwydd. |
| 4. Bean Goose, | Elcysen. |
| 5. White fronted, | Gwydd wyllt. |
| 6. Bernacle, | Gwyran. |
| 7. Brent, | Gwyran fanyw. |
| 8. Eider, | Hwyad fwythblu. |
| 9. Velvet, | Hwyad felfedog. |
| 10. Scoter, | Y fôr-Hwyad ddû. |
| 11. Tufted, | Hwyad goppog. |
| 12. Scaup, | Llygad arian. |
| 13. Golden eye, | Llygad aur. |
| * 14. Morillon, | Hwyad benllwyd. |
| 15. Shieldrake, | Hwyad yr eithin,
Hwyad fruith. |
| | 16. Mallard, |

A P P E N D I X.

- | | |
|----------------------------|--------------------------------------|
| 16. Mallard, | Cors Hwyad, Garan
Hwyad, Hydnywy. |
| 17. Shoveler, | Hwyad lydanbig. |
| 18. Red breasted Shoveler, | Hwyad fron-goch ly-
danbig; |
| 19. Pintail, | Hwyad gynffonfain. |
| 20. Long tailed, | Hwyad gynffon gwen-
nol. |
| 21. Pochard, | Hwyad bengoch. |
| 22. Ferruginous, | Hwyad frech: |
| 23. Wigeon, | Chwiw. |
| *24. Bimaculated, | |
| 25. Gadwall, | Y gors Hwyad lwyd. |
| 26. Garganey, | Hwyad addfain. |
| 27. Teal, | Cor Hwyad, Crach
Hwyad: |

XLVIII.

C O R V O R A N T.

- | | |
|---------------|-------------------|
| 1. Corvorant, | Mûlfran, Môrfran. |
| 2. Shag, | Y Fulfran leiaf. |
| 3. Gannet, | Gan, Gans. |

A P P E N D I X.

- | | |
|---------------------------|----------------|
| * 1. Rough legged Falcon, | |
| 2. Roller, | Y Rholydd, |
| | 3. Nutcracker, |

- | | |
|------------------------|-----------------------|
| 3. Nutcracker, | Aderyn y cnau. |
| * 4. Oriole, | Y Fwyalchen felan. |
| 5. Rose colored Ouzel, | Y Fwyalchen gôch.. |
| 6. Crane, | Garan. |
| 7. Egret, | Cryr coppog lleiaf. |
| 8. Little Bittern, | Aderyn y bwnn lleiaf. |
| * 9. Spoon-bill, | Y Llydan-big. |

* * The birds marked * are not in the octavo edition, 1768.

No. IX.

CATALOGUE OF THE EUROPEAN
QUADRUPEDS, BIRDS, AND
REPTILES, *Extra-Britannic.*

SINCE the great use of Mr. RAY's *Sylloge Stirpium Europæarum extra Britannias** has been so fully approved by the travelling Botanist, it is thought a similar enumeration of the species of certain classes of the animal kingdom would be equally agreeable and serviceable to the travelling Zoologist. It comprehends the *Extra-Britannic* quadrupeds, birds, and reptiles of *Europe*, formed from the works of the general naturalists, from the *Fauna* of different countries, and from my own observations. The arrangement of the subjects are according to the excellent method of our countryman Mr. RAY, a little altered, or reformed. As there are not at this instant *English* names for most of the articles, we have been obliged to substitute those used by *Linnaeus* and other foreign writers; but to gratify the *English* reader's curiosity, who may wish for fuller accounts of the quadrupeds in his own language, we refer him in the second column to our own *synopsis* of *Quadrupeds*; and in respect to the birds, to the *English* edition of Mr. WILLUGHBY's *Ornithology*.

* *Stirpium Europæarum extra Britannias nascentium Sylloge*,
1694.

CLASS I. QUADRUPEDIA.

QUADRUPEDS.

Lin. Syn. noſt. Place.
No.

I <i>Bos</i>	Urus	99	4 Lithuania
	Bubalis	<i>ibid.</i>	5 Italy
II <i>Ovis</i>	Strepsiceros	98	8 B. Hungary
	Laticauda		Calmuck country
III <i>Capra</i>	Rupicapra	95	10 Alps, Pyrenees
	Ibex	<i>ibid.</i>	9 Alps
	Ammon	97	11 Corſica, Sardinia
	Tartarica	<i>ibid.</i>	30 Ukraine
IV <i>Cervus</i>	Alces	92	35 N. of the Baltic
	Tarandus	93	36 <i>ibid.</i>
V <i>Sus</i>	Aper Sylveſtris	102	54 Germany, France, &c.
II.			
VI <i>Canis</i>	Lupus	58	111 Almoſt all the con- tinent
	Lagopus	59	113 Lapland
VII <i>Felis</i>	Lynx	62	135 Many parts of Eu- rope

		Lin.	Syn. noſt. No.	Place.
VIII <i>Urfus</i>	Arctos	69	138	Many parts of Europe
	Maritimus	70	139	Nova Zembla
	Lufcus, et	71		
	Mustela Gulo	67	140	N. of the Baltic
IX <i>Viverra</i>	Genetta	65	171	Spain
	Zibellina	68	156	Lapland
	Perouastea		p. 233	Note, Poland
X <i>Lutra</i>	Mustela Lutreola	66	174	Sweden
XI <i>Caſtor</i>	Fiber	78	190	N. of Europe
	Mofchatus	79	192	Ruffia
XII <i>Hyſtrix</i>	Criſtata	76	193	Italy
XIII <i>Marmotta</i>	Mus Marmotta	81	197	Alps, Poland
	Cricetus	82	200	Germany
	Souſlik		201	S. of Ruffia
	Lemmus	80	202	Lapland
	Citellus	80	203	S. of Europe
	Zemni		204	Poland
XIV <i>Sciurus</i>	Volans	88	221	Poland
	Glis	87	217	S. of Europe
	Mus quercinus	84	218	<i>ibid.</i>
XV <i>Jerboa</i>	Mus Jaculus	85	223	Calmucks country
XVI <i>Mus</i>	Gregarius	84	234	Germany, Sweden
III.				
XVII <i>Trichechus</i>	Rofmarus	49	263	Within the polar circle
IV.				
XVIII <i>Vespertilio</i>	Serotina		288	France
	Pipiftrilla		289	<i>ibid.</i>
	Barbaſtella		290	<i>ibid.</i>
			286	<i>ibid.</i>

CLASS

C L A S S II. A V E S.

B I R D S.

I. A C C I P I T R E S.

R A P A C I O U S.

				<i>Wil. orn.</i>	<i>Place.</i>
I	<i>Vultur</i>	Vultur	<i>Briff.</i> I. 453	66	Alps, Italy
		Pernopterus	<i>Raii syn.</i> 10	64 67	Spain, Minorca
II	<i>Falco</i>	Leucocephalus	<i>Lin.</i> 124		North †
		Melanætos	<i>ibid.</i>	61	
		Morphno congener	<i>Raii syn.</i> 7	63	
		Rusticolus	<i>Lin.</i> 125		Sweden
		St. Martini	<i>Briff.</i> I. 443		France
		Islandicus	<i>Brunnich</i> No.		Iceland
		Vespertinus	<i>Lin.</i> 129		Ingria
		Minutus	131		Malta
		Subfurcatus	<i>Kramer</i> {	326 No. 5	
		Castaneus		327 — 6	Austria
		Ferrugineus		328 — 7	
		Cinereus		329 — 12	
III	<i>Strix</i>	* Scandiaca	<i>Lin.</i> 132		North
		Subaurita	<i>Kr.</i> 323 No. 3		Austria

† Countries the other side the *Baltic*.

* * *Nyctea*

		<i>Wil. orn.</i>	<i>Place.</i>
* *	Nyctea	<i>Lin.</i> 132	North
	Sylvestris	<i>Scop. No.</i> 13	Carniola
	Funerea	<i>Lin.</i> 133	North
IV	<i>Lanius</i> Infaustus	<i>Lin.</i> 138	197? North?
	Major <i>Gesneri</i> 581	<i>Briff.</i> II. 146	88 Germany

II. P I C Æ.

P I E S.

		<i>Wil. orn.</i>	<i>Place.</i>
V	<i>Corvus</i> Caryocatactes	<i>Lin.</i> 157 132	Germany N.
	Pyrrhocorax	— 158	Alps
VI	<i>Coracias</i> Garrulus	— 159 131	Europe <i>passim</i> †.
VII	<i>Oriolus</i> Galbula	— 160 198	<i>ibid.</i>
VIII	<i>Cuculus</i> Glandarius	— 169	Spain
IX	<i>Picus</i> Martius	— 173 135	Europe <i>passim</i>
	Tridactylus	— 177	Norway
X	<i>Merops</i> Apiaſter	— 182 147	Ita. S. of Eu.
	Icterocephala	<i>Briff.</i> IV. 537 148	<i>ibid.</i>
XI	<i>Certhia</i> Muraria	— 184	Italy

† Those with this word refer to all the continent, except the extreme north, *Lapland*, &c.

III. GAL.

III. G A L L I N Æ.

G A L L I N A C E O U S.

				<i>Wil. orn.</i>	<i>Place.</i>
XII <i>Tetrao</i>	* Nemesianus	<i>Sco. No.</i>	171		Carniola
	Betulinus	<i>No.</i>	172		<i>ibid.</i>
	Lagopus	<i>Bru. No.</i>	199		Norway
	Bonafia	<i>Lin.</i>	257	175	Europe <i>passim</i>
	** Rufus	—	276	167	S. of Eu.
	Francolinus	—	275	174	<i>ibid.</i>
	Alchata	—	276	167 No. 5	Pyrenees
	Græca (Perdix)	<i>Briff. I.</i>	241	169	S. of Eu.
	Montana		224		
	Tridactyla	<i>Sharw's tra.</i>	253		Spain
XIII <i>Otis</i>	Tetrax	<i>Lin.</i>	264	179	France, Italy

IV. P A S S E R E S.

S M A L L B I R D S.

				<i>Wil. orn.</i>	<i>Place.</i>
XIV <i>Sturnus</i>	Collaris	<i>Sco. No.</i>	192		Carniola, Spain
XV <i>Turdus</i>	Arundinaceus	<i>Lin.</i>	296	143	Europe <i>passim</i>
	Roseus		294	194	Italy
	Saxatilis		294	197	
	Cyanus		296	191	Italy, Spain
	Cœruleus	<i>Belon</i>		197	Alps
Vol. II.		D d d			XVI

			<i>Wil. orn.</i>	<i>Place.</i>
XVI	<i>Alauda</i>	Cristata	<i>Lin.</i> 288 209	Europe <i>passim</i>
		Spinoletta	288 209	Italy
		Calandra	288	Italy, Spain
		Alpestris	299	Poland
		Lusitanica	<i>nova</i>	Portugal
		Craffiostrois	<i>nova</i>	<i>ibid.</i>
XVII	<i>Emberiza</i>	Hortulanus	<i>Lin.</i> 309 270	S. of Eu.
		Cia	310 271	<i>ibid.</i>
		Cirlus	311 269	zivolo <i>ibid.</i>
		Barbata	<i>Sco. No.</i> 210	Carniola
		Brumalis	<i>No.</i> 213	<i>ibid.</i>
XVIII	<i>Fringilla</i>	Lapponica	<i>Lin.</i> 317	North
		Lulensis	318	Sweden
		Citrinella	320 265	S. of Eu.
		Serinus	320 265	<i>ibid.</i>
		Petronia	322 267	<i>ibid.</i>
		Passer Campestris	<i>Briff. III.</i> 82 251	Friquet <i>ibid.</i>
		Torquatus	85 250	<i>No. 7 ibid.</i>
		Stultus	87 249	— 2 <i>ibid.</i>
		Bononiensis	91 250	— 4 <i>ibid.</i>
		Albicilla	92 250	— 5 <i>ibid.</i>
		Passerculus	93 252	— 13 <i>ibid.</i>
		Sclavonicus	24 250	— 6 Dalma- tia
		Argentoratensis	146	Straf- bourg
		Grau-fink	<i>Frisch. I.</i> 3	Germa- ny
XIX	<i>Motacilla</i>	Schoenobanus	<i>Lin.</i> 329	Italy
		Curruca	329	Sweden
		Ficedula	<i>Lin.</i> 330	S. of Eu.
				Stapazina

Wil. orn. Place.

Stapazina	331	Strapazino	233	<i>ibid.</i>
Dumetorum	334			Austria
Erithacus	335	3tia Alder.	218	Sweden
Suecica	336			North
Curruca minor <i>Bri. III.</i>	374	Borin. <i>Wil.</i>	216	Italy
cineraria	376			Italy, &c.
rufa	387			Ger- many
navia	389	Boarina	217	Italy
Ruticilla Gibraltar	407			S. of Eu.
Phœnicurus torqua	411			<i>ibid.</i>
Rubecula Bononien.	422	Spipola	234	Bologna
Curruca grisea nav.	<i>App. VI.</i>	112		
Tithys	<i>Sco. No.</i>	233		Carniola
Zya	—	234		<i>ibid.</i>
Muscipeta	—	236		<i>ibid.</i>
Lusitanica	<i>nova</i>			Portugal
Hispanica	<i>nova</i>			Spain
XX <i>Parus</i>	Cristatus	<i>Lin.</i>	340	242 Ger- many
	Pendulinus		342	Austria
	Ignotus	<i>Brun. p.</i>	73	North
XXI <i>Hirundo</i>	Melba	<i>Lin.</i>	345	Spain
	Rupeltris	<i>Sco. No.</i>	167	Spain, & Carniola

V. AQUATICÆ FISSIPEDES.

CLOVEN FOOTED WATER FOWL.

			<i>Wil. orn.</i>		<i>Place.</i>
XXII	<i>Platalea Leucorodia</i>	<i>Lin.</i>	231	289	Europe <i>passim</i>
XXIII	<i>Ardea</i>				
	Grus	—	234	274	
	Ciconia		235	286	
	Nigra		<i>ibid.</i>	<i>ibid.</i>	
	Nycticorax		<i>ibid.</i>	279	
	Purpurea		236		S. of Eu.
	Garzetta		237	280	<i>ibid.</i>
	Grisea		239		
	Minuta		240		
	Candida minor	<i>Bri. V.</i>	438	280	
	Torquata		440	282	
	Botaurus major		455	283	
	Botaurus minor		453		
	Botaurus striatus		454		
	Botaurus rufus		458	283	
	Botaurus nævius		462	.	
	Cancrophagus		466	281	No. 9 Italy
	Cancroph. castaneus		468		<i>ibid.</i>
	Cancroph. rufus		469	281	— 7
	Cancroph. nævius		471		
	Cancroph. luteus		472	281	— 8 Italy
	Viridis Belgica	<i>nova</i>			Holland
	Ardea alba	<i>Sco. No.</i>	127		Carniola
XXIV	<i>Tantais Falcinellus</i>	<i>Lin.</i>	241	295	Germany
XXV	<i>Numenius Danicus</i>	<i>novus?</i>			Denmark
	Passerinus	<i>novus</i>			Holland

XXVI

			<i>Wil. orn.</i>	<i>Place.</i>
XXVI <i>Scolopax</i>	Fusca	<i>Lin.</i>	243	
	Australis	<i>Sco. No.</i>	94	Carniola
XXVII <i>Tringa</i>	Gambetta	<i>Lin.</i>	248	
	Striata ?			
	Calidris			
	Helvetica			
	Varia			
	Totanus nævius	<i>Briff. V.</i>	200	
	Cinclus torquatus		216	
	Calidris grisea		233	
	Calidris nævia		229	
	Bononiensis major		110	
	Erythropus	<i>Sco. No.</i>	146	
	Undata	<i>Brun. —</i>	183	
XXVIII <i>Pratincola</i>	Krameria	<i>Kramer</i>	381 L. 345 No. 12	Austria
XXIX <i>Charadrius</i>	Alexandrinus	<i>Lin.</i>	253	
	Apricarius		254	
	Luteus	<i>novus</i>		France
XXX <i>Gallinula</i>	Grinetta	<i>Wil. orn.</i>	315	Italy
	Serica	<i>ibid.</i>		<i>ibid.</i>
	Major		313	
	Porphyrion	<i>Balearicus novus</i>		Minorca

VI. PEDIBUS PINNATIS.

WITH FINNED FEET.

XXXI <i>Phalaropus</i>	Platyrrhynchus	<i>Brunnich</i>	No. 172	North
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VII. PEDIBUS PALMATIS.

WITH WEBBED FEET.

			<i>Wil. orn.</i>	<i>Place.</i>
XXXII	<i>Phœnicopterus</i>	Ruber	<i>Lin.</i>	230 320 S. of Fr.
XXXIII	<i>Corrira</i>	Longipes	<i>Raii syn.</i>	118 231 Italy
XXXIV	<i>Mergus</i>	Castor		
		Æthiops	<i>Scop. No.</i>	90 Carniola
XXXV	<i>Larus</i>	Albus	<i>Scop. No.</i>	106 <i>ibid.</i>
		Merulinus		108 <i>ibid.</i>
		Bicolor		110 <i>ibid.</i>
XXXVI	<i>Sterna</i>	Cinerea	<i>Bri. VI.</i>	220
		Nævia		216
XXXVII	<i>Anas</i>	Niveus (anser)	<i>Bri. IV.</i>	228 North
		Moscoviticus?		277 360
		Speṡtabilis	<i>Lin.</i>	195 North
		Glaucion		201 367
		Histrionica		204 North
		Mufcaria	<i>Raii syn.</i>	146 375
		Ferroënfis	<i>Bri. VI.</i>	466 Ferroc ifles
		Subterranea	<i>Scop. No.</i>	83 Carniola
		Cinerea	<i>K. 341 No.</i>	14 Austria
XXXVIII	<i>Pelecanus</i>	Onocrotalus	<i>Lin.</i>	215 327 Danube, Po.

CLASS.

CLASS III. REPTILIA.

R E P T I L E S.

* P E D A T A :

W I T H F E E T.

				Place.
<i>Rana</i>	<i>Bombina</i>	<i>Lin.</i>	355	Sweden
	<i>Arborea</i>		357 <i>Raii syn. qua.</i> 231	Germany
<i>Lacerta</i>	<i>Chamæleon</i>	<i>Lin.</i>	364 <i>Raii syn. qua.</i> 276	S. of Europe
	<i>Salamandra</i>		371	273 <i>ibid.</i>
	<i>Orbicularis</i>		365	264 Naples
	<i>Marmorata</i>		368	S. of Europe
	<i>Aurata</i>		<i>ibid.</i>	<i>ibid.</i>
	<i>Umbra?</i>		367	<i>ibid.</i>
	<i>Seps</i>		363	<i>ibid.</i>
	<i>Chalcides</i>		366 <i>Raii syn. qua.</i> 272	<i>ibid.</i>
<i>Testudo</i>	<i>Corticata</i>	<i>Rondel. pisc.</i>	445	Mediterranean
	<i>Orbicularis</i>	<i>Lin.</i>	351	S. of Europe
	<i>Græca</i>		352 <i>Raii syn. qua.</i> 253	<i>ibid.</i>
	<i>Lutaria</i>		<i>ibid.</i>	254 <i>ibid.</i>

** A P O D I A.

W I T H O U T F E E T.

<i>Serpentes</i>	<i>Anguis Æsculapii</i>	<i>Plinii lib. xxix. c. 4.</i>	<i>Raii syn. qua.</i> 291	Italy
	<i>Coluber Chersea</i>	<i>Lin.</i> 377 <i>Wulff. Boruff.</i> 10		Sweden
	<i>Aspis</i>	<i>Lin.</i> 378 <i>Strom. Sondm.</i> 193		Fr. Norway
	<i>Jaculus</i>	<i>Wulff. Boruff.</i> 13		Prussia
		D d d 4		INDEX.

I N D E X.

A.

	Page
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